Dominion Energy Services, Inc.
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 North 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 North 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
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2024 CCR & VSWMR Annual Groundwater Monitoring and Corrective Action Report

Bremo Power Station
North Pond
Solid Waste Permit No. 618

Prepared for:

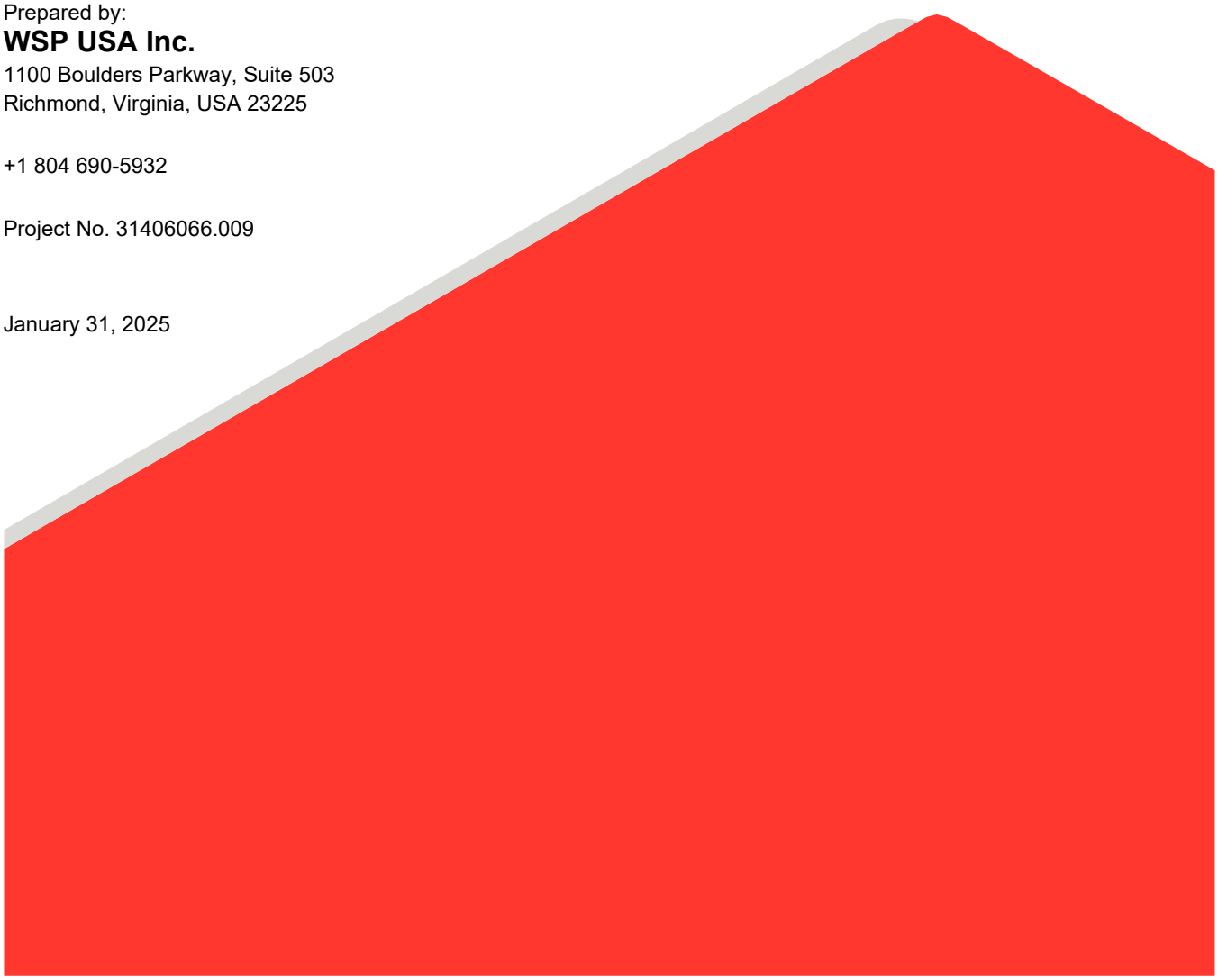
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Project No. 31406066.009

January 31, 2025



EXECUTIVE SUMMARY

This *2024 CCR and VSWMR Annual Groundwater Monitoring and Corrective Action Report* (Report) was prepared by WSP USA Inc. (WSP) on behalf of Virginia Electric and Power Company d/b/a Dominion Energy Virginia (Dominion Energy) for the North Pond (Unit) at the Bremo Power Station (Station). Historically, the Station operated the Unit as a surface impoundment for management of Coal Combustion Residuals (CCR) from power generation operations at the Station. The Unit is considered an existing CCR surface impoundment under Title 40 Code of Federal Regulations (CFR) Part 257.50 *et seq*. [Disposal of CCR from Electric Utilities (CCR Rule; Federal Register Vol. 80, No. 74, 21302-21501 on April 17, 2015, as amended)], 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, the VSWMR, 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 for the previous year or within 120 days of completing the laboratory analyses for the second semi-annual event of the year, whichever occurs first.

The Report was prepared to meet the reporting requirements for the CCR Rule, 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).*

EXECUTIVE SUMMARY

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

- In 2024, there were statistically significant increases over background for the following Appendix III constituents at the following compliance wells:
  - Boron – wells MW-24, MW-27D, MW-33, MW-34, MW-35
  - Calcium – wells MW-24, MW-27D, MW-33, MW-35
  - Total Dissolved Solids – well MW-27D
- In 2024, there were statistically significant increases over background for the following Appendix III constituents at the following SWP sentinel wells:
  - Boron – wells MW-27S and MW-28
  - Calcium – wells MW-27S and MW-28
  - Fluoride – well MW-25S
  - Total Dissolved Solids – well MW-27S

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

- The Unit initiated the AMP on March 12, 2018.

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 was a statistically significant increase over the federal CCR Rule groundwater protection standard (GWPS) as follows:
  - Cobalt – well MW-24
- In 2024, there were statistically significant increases over the SWP groundwater protection standard (GPS) for the following constituents at the following compliance wells:
  - Cobalt – well MW-24
  - Zinc – well MW-33
- In 2024, there were statistically significant increases over the SWP GPS for constituents at the following sentinel well:
  - Nickel – MW-28

(B) Provide the date when the Assessment of Corrective Measures was initiated for the CCR Unit

- Dominion Energy initiated an Assessment of Corrective Measures (ACM) for the Unit on December 5, 2018.
- Dominion Energy initiated an ACM Addendum to include additional CCR and SWP constituents on July 29, 2020.

EXECUTIVE SUMMARY

(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

- The ACM and associated ACM Field Investigation Report were completed on May 4, 2019.
- An ACM Addendum Report and Nature and Extent Study Addendum Report were completed and were submitted to DEQ on November 10, 2020. The Unit's NES/ACM were most recently revised and submitted to DEQ on April 25, 2024, and placed in the operating record on the same day.

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 North Pond (Unit) at the Bremo Power Station (Station). Historically, the Station operated the Unit for management of Coal Combustion Residuals (CCR) generated at the Station. The Unit is considered an existing CCR surface impoundment under Title 40 Code of Federal Regulations (CFR) Part 257.50 *et seq*. [Disposal of CCR from Electric Utilities (CCR Rule; Federal Register Vol. 80, No. 74, 21302-21501 on April 17, 2015, as amended)], 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); (VSWMR)]. 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 for the previous year.

The Unit is also subject to regulation under the VSWMR as an existing CCR surface impoundment and is maintained 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 for the previous year by January 31st of each calendar year or within 120 days of completing the laboratory analyses for the second semi-annual compliance event of the previous year, 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 semi-annual and the second semi-annual 2024 Modified Assessment Monitoring Program (AMP) events performed in February 2024 and August 2024, respectively.

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 converted from a coal-fired power plant to a natural gas-fired power plant in 2014 and was placed in cold storage in 2018. Decommissioning of the Station commenced in 2020. The Unit covers approximately 67.5 acres. Placement of CCR into the Unit generated from the Station began in the mid-1980s and ceased in October 2015. No newly generated CCR has been placed in this Unit since the conversion to a gas-fired plant, but CCR from two (2) inactive CCR surface impoundments at the Station were consolidated in the Unit during the

closure by removal process that concluded in 2020. The Unit is scheduled for closure by removal pursuant to Virginia Code section 10.1-1402.03. The Unit is subject to the groundwater monitoring requirements of the CCR Rule, the VSWMR, and the DEQ-issued SWP.

1.3 Key Actions

Key actions for the Unit to date are as follows:

- Initiated the collection of eight (8) baseline/background samples on October 27, 2016, and completed the background monitoring activities on July 24, 2017, pursuant to the CCR Rule [257.94(b)];
- 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 September 2018 and January 2021), pursuant to the CCR Rule [257.105(h)(2)];
- Certified the Unit's groundwater monitoring system pursuant to the CCR Rule [257.91(f) and posted the Certification in the Unit's operating record on October 17, 2017, 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 October 17, 2017, pursuant to the CCR Rule [257.105(h)(4)];
- Placed a notification of a Statistically Significant Increase (SSI) over Unit background concentrations under the DMP in the Unit's operating record on December 13, 2017;
- Initiated the AMP on March 12, 2018, with a notification placed in the Unit's operating record on April 11, 2018;
- Established federal CCR groundwater protection standards (GWPS) for detected constituents in Appendix IV of Part 257 on September 6, 2018 (revised September 17, 2018), pursuant to the CCR Rule [257.95(d)(2)];
- Initiated an Assessment of Corrective Measures (ACM) under the CCR Rule on December 5, 2018, and placed the ACM Initiation Notification in the Unit's operating record on January 4, 2019;
- Governor Northam signed Senate Bill 1355 and House Bill 2786 on March 20, 2019, requiring the closure by removal of the Unit;
- Completed the ACM for lithium on May 3, 2019, and placed it into the Unit's operating record on May 4, 2019;
- The Station was issued a solid waste facility permit (SWP No. 618) by DEQ on June 5, 2019, that initiated the Modified AMP and includes groundwater monitoring requirements for the Unit;
- The *North Ash Pond Facility Background Determination Report* (Golder, 2019c) was submitted to the DEQ on July 3, 2019 (revised December 4, 2019 and March 10, 2020). The report included proposed SWP Groundwater Protection Standards (GPS);

- Received a letter from DEQ on March 12, 2020, approving background-based SWP GPS proposed for the Unit on July 3, 2019 (revised March 10, 2020);
- Completed an NES-ACM Addendum for boron, cobalt, lithium, molybdenum, nickel, and silver on November 10, 2020, and placed it into the Unit's operating record on the same day;
- The Station was issued a minor modification to SWP No. 618 on January 12, 2021, approving the revised GMP submitted in January 2021;
- 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 July 30, 2021, pursuant to the CCR Rule [257.105(h)(4)];
- Completed a Revised NES Addendum Report on October 29, 2021, and placed it into 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)];
- Completed revised NES and ACM reports based on DEQ comments on October 3, 2022, 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 3, 2023. The report included proposed SWP GPS, which were 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);
- Conducted the first semi-annual 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;
- Placed a copy of the North Pond Semi-Annual Remedy Selection Progress Report No. 10 in the Unit's operating record on April 3, 2024;
- Conducted the 2024 first semi-annual verification event on April 11, 2024;
- Completed revised NES and ACM reports based on DEQ comments on April 25, 2024, and placed them into the Unit's operating record on the same day;
- Notification of first semi-annual 2024 SWP GPS SSIs was submitted to the DEQ on May 15, 2024, and notification of federal CCR GWPS exceedances was placed in the Unit's operating record on the same day;
- Submitted the 2024 First Semi-Annual Groundwater Monitoring Report to the DEQ on July 30, 2024, in accordance with the SWP;

- Conducted the 2024 second semi-annual Modified AMP compliance event on August 26-27, 2024, and completed analysis on October 13, 2024, pursuant to the CCR Rule [257.95] and the Unit's SWP;
- Placed a copy of the North Pond Semi-Annual Remedy Selection Progress Report No. 11 in the Unit's operating record on September 30, 2024;
- Notification of second semi-annual 2024 SWP GPS SSIs was submitted to the DEQ on November 22, 2024, and notification of federal CCR GWPS exceedances was 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 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 late 1930s. CCR from the power generation activities had historically been stored in the three 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 in the West Pond was competed in January 2020. 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 requirements under the CCR rule were commenced by October 17, 2017, and followed by the provisions of the DEQ-issued SWP on June 5, 2019.

2.1 Monitoring Well Network

The Unit's 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-29S, and MW-29D] and five (5) downgradient monitoring wells (MW-33, MW-34, MW-35, MW-24, and MW-27D) designed to monitor the uppermost aquifer beneath the Unit. In addition, the Station maintains six (6) VSWMR sentinel wells (MW-25S, MW-25D, MW-26S, MW-26D, MW-27S, and MW-28). 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 a number of 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 surface-exposed overburden (saprolite) 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 downgradient properties in the immediate vicinity of the Unit 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 direction beneath the Unit by generating groundwater potentiometric surface maps using groundwater elevations from compliance network wells and VSWMR sentinel wells. The maps 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 during the second semi-annual 2024 Modified AMP compliance event on August 26, 2024. 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 semi-annual 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 in Appendix C, the average groundwater flow rate in the uppermost aquifer beneath the Unit is approximately 19 feet per year for the saprolite and 725 feet per year for the gneiss bedrock. The 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 saprolite and underlying gneiss bedrock, the estimated average hydraulic conductivity values for the saprolite 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 4, 2021 (Golder, 2021c). As presented in the GMP, the average hydraulic conductivity for the saprolite is currently estimated at 3.24E-06 feet per second (ft/s; range of 1.76E-06 ft/s to 5.98E-06 ft/s is currently observed) and 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 published 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 saprolite and underlying bedrock are very close. Therefore, the difference between the calculated groundwater flow rates between the saprolite and underlying fractured 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 saprolite (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 saprolite and fractured bedrock on a cross-sectional flow area basis are essentially the same since the flow cross-sectional area is less.

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 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. Samples collected during the first semi-annual Modified AMP event were couriered by WSP on ice in secured coolers under chain-of-custody control to Pace Analytical, LLC (Pace) in Huntersville, North Carolina on February 12, 13, and 14, 2024. The samples were then distributed to Pace locations in Asheville, North Carolina; Charlotte, North Carolina; and Mount Juliet, Tennessee. Pace is certified to perform these analyses by the Division of Consolidated Laboratory Services (DCLS) under the Virginia Environmental Laboratory Accreditation Program (VELAP) as required under the federal and state regulations and outlined in the GMP and SWP. VELAP identification numbers for the Pace locations in Asheville, NC (#460222); Charlotte/Huntersville, NC (#460221); and Mount Juliet, TN (#460132) are current. 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

3.1.1 First Semi-Annual 2024 Verification Sampling Activities

Due to the identification of suspect analytical results for silver in the sample collected from sentinel well MW-25D and for zinc in the sample collected from the compliance monitoring well MW-24, a verification sampling event was conducted on April 11, 2024, in accordance with Section XI.L.3 of the SWP. The wells were sampled in accordance with the GMP. The field data sheets for the first semi-annual 2024 verification sampling event are included in Appendix D.2. After completing the field activities, the groundwater verification samples were shipped April 11, 2024, on ice and in a secured cooler under chain-of-custody control to Pace in Huntersville, North Carolina, and were received on April 15, 2024. The samples were then distributed by Pace to their Asheville, North Carolina location for analysis. A summary of the first semi-annual 2024 verification sampling event is presented in the following table:

Monitoring Event	Sample Date(s)	Final Laboratory Package Receipt Date
First Semi-Annual Verification Event	April 11, 2024	April 19, 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 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 and 27, 2024. The samples were then distributed to the Charlotte, North Carolina; Asheville, North Carolina; and Mt 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.3. 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 26-27, 2024	October 13, 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 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.

4.1.1 First Semi-Annual 2024 Verification Event

Groundwater samples collected during the first semi-annual 2024 verification event were analyzed for silver in sentinel well MW-25D and zinc in downgradient monitoring well MW-24. 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.

4.2 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.3. A summary of the sampling data for the event is presented in Table 3.

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 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. The analytical results from these 2024 sampling events are discussed in the following sections.

5.1 Ammonia

Ammonia was detected at an estimated concentration above the laboratory method detection limit (MDL) in the first semi-annual sample collected from downgradient well MW-34 and in the second semi-annual sample collected from sentinel well MW-26D. 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 well MW-24 and in the first semi-annual sample collected from sentinel well MW-26D. Quantified concentrations ranged from 0.21 milligrams per liter (mg/L) in the first semi-annual samples collected from upgradient well MW-29D and sentinel well MW-26D to 0.53 mg/L in the first semi-annual sample collected from MW-24.

5.2 Antimony

Antimony was not detected in 2024 samples.

5.3 Arsenic

Arsenic was detected at an estimated concentration above the laboratory MDL in the sample collected from sentinel well MW-25D during the first semi-annual event and in the second semi-annual sample collected from MW-35. Arsenic was not detected above the RL in 2024 samples.

5.4 Barium

Barium was detected at an estimated concentration above the laboratory MDL in both semi-annual samples collected from upgradient well MW-11. Barium was detected at quantified concentrations above the RL in all remaining samples at concentrations ranging from 11.6 micrograms per liter (µg/L) in the second semi-annual sample collected from sentinel well MW-25S to 198 µg/L in the first semi-annual sample collected from sentinel well MW-26D.

5.5 Beryllium

Beryllium was not detected in 2024 samples.

5.6 Boron

Boron was detected at an estimated concentration above the MDL in the second semi-annual samples collected from upgradient well MW-29D and sentinel wells MW-25S, MW-25D, and MW-26D. Boron was detected at quantified concentrations above the RL in both semi-annual samples collected from downgradient wells MW-24, MW-27D, MW-33, MW-34, and MW-35 and sentinel wells MW-27S and MW-28 at concentrations ranging from 195 µg/L in the first semi-annual sample collected from MW-24 to 1,500 µg/L in the first semi-annual sample collected from sentinel well MW-27S.

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 and sentinel well at concentrations ranging from 7,310 µg/L in the first semi-annual sample collected from upgradient well MW-29S to 122,000 µg/L in the first semi-annual sample collected from sentinel well MW-27S.

5.9 Chloride

Chloride was detected at quantified concentrations above the RL in both samples collected from all wells at concentrations ranging from 2.6 mg/L in the second semi-annual sample collected from sentinel well MW-26S to 42.9 mg/L in the second semi-annual sample collected from upgradient well MW-29D.

5.10 Chromium

Chromium was detected at an estimated concentration above the MDL in both semi-annual samples collected from upgradient well MW-29S, downgradient well MW-35, and sentinel well MW-28; the first semi-annual samples collected from sentinel wells MW-25D and MW-26S; and in the second semi-annual sample collected from MW-34. Chromium was not detected above the RL in 2024 samples.

5.11 Hexavalent Chromium

Hexavalent chromium was detected at concentrations above the RL in both semi-annual samples collected from upgradient wells MW-11 and MW-29S, downgradient wells MW-27D and MW-34, sentinel wells MW-26S and MW-28; in the first semi-annual samples collected from downgradient well MW-33 and sentinel well MW-25S, and in the second semi-annual samples collected from upgradient well MW-29D and sentinel wells MW-26D and MW-27S. Hexavalent chromium was detected at concentrations ranging from 0.025 µg/L at MW-27D to 1.1 µg/L at 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, downgradient well MW-35, and sentinel well MW-27S; in first semi-annual samples collected from upgradient well MW-29S, downgradient wells MW-27D and MW-33, and sentinel well MW-28; and in the second semi-annual samples collected from sentinel wells MW-25D and MW-26D. Cobalt was detected at quantified concentrations above the RL in both semi-annual samples collected from downgradient well MW-24 and sentinel well MW-25S and in the first semi-annual samples collected from sentinel wells MW-25D and MW-26D at concentrations ranging from 1.1 µg/L in the first semi-annual samples collected from sentinel wells MW-25D and MW-26D to 60.4 µg/L in the first semi-annual sample collected from downgradient well MW-24.

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 and sentinel wells MW-25D, MW-25S, and MW-27S; in the first semi-annual sample collected from sentinel well MW-26D; and in the second semi-annual event sample collected from downgradient wells MW-24 and MW-33. Copper was detected at a quantified concentration above the RL in the first semi-annual sample collected from downgradient well MW-24 at a concentration of 10.1 µg/L.

5.14 Fluoride

Fluoride was detected at estimated concentrations above the MDL in both semi-annual samples collected from downgradient well MW-33; in the first semi-annual samples collected from downgradient wells MW-24, MW-34, and MW-35 and sentinel well MW-27S; and in the second semi-annual sample collected from sentinel well MW-25S. Fluoride was detected at quantified concentrations above the RL in both semi-annual samples collected from upgradient well MW-29D and downgradient well MW-27D and the first semi-annual sample collected from sentinel well MW-25S at concentrations ranging from 0.10 mg/L in the second semi-annual sample collected from MW-27D to 0.19 mg/L in the first semi-annual sample collected from sentinel well MW-25S.

5.15 Hardness

Hardness was detected at quantified concentrations above the RL in both semi-annual samples collected from each compliance and sentinel well at concentrations ranging from 24,200 µg/L in the first semi-annual sample collected from upgradient well MW-29S to 536,000 µg/L in the first semi-annual sample collected from sentinel well MW-27S.

5.16 Iron

Iron was detected at estimated concentrations above the MDL in the first semi-annual sample collected from sentinel well MW-26S; and in the second semi-annual sample collected from downgradient well MW-34. Iron was

detected at quantified concentrations above the RL in all remaining samples (except first semi-annual MW-34 and second semi-annual MW-26S) at concentrations ranging from 27.9 µg/L in the second semi-annual sample collected from sentinel well MW-27S to 6170 µg/L in the second semi-annual sample collected from the downgradient well MW-24 field duplicate.

5.17 Lead

Lead was detected at estimated concentrations above the MDL in the first semi-annual samples collected from downgradient wells MW-24 and MW-33 and sentinel wells MW-25S and MW-28 and in the second semi-annual sample collected from sentinel well MW-25D. Lead was detected at quantified concentrations above the RL in the first semi-annual sample from sentinel well MW-25D at a concentration of 1.3 µg/L.

5.18 Lithium

Lithium was detected at estimated concentrations above the MDL in both semi-annual samples collected from upgradient well MW-29D and sentinel wells MW-25S, MW-26S, and MW-28; and 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 downgradient wells MW-24, MW-27D, MW-33, MW-34, and MW-35 and sentinel wells MW-25D, MW-26D, and MW-27S at concentrations ranging from 2.7 µg/L in both semi-annual samples collected from MW-24 to 30.0 µg/L in the second semi-annual sample collected from MW-27D.

5.19 Manganese

Manganese was detected at quantified concentrations above the RL in both semi-annual samples collected from each well at concentrations ranging from 3.0 µg/L in the first semi-annual sample collected from upgradient well MW-11 to 3,230 µg/L in the second semi-annual duplicate sample collected from downgradient well MW-24.

5.20 Mercury

Mercury was detected at estimated concentrations above the MDL in both semi-annual samples collected from downgradient well MW-34. Mercury was not detected at quantified concentrations above the RL in 2024 samples.

5.21 Molybdenum

Molybdenum was detected at estimated concentrations above the MDL in both semi-annual samples collected from sentinel well MW-26D and the first semi-annual sample collected from downgradient well MW-24. Molybdenum was detected at quantified concentrations above the RL in both semi-annual samples collected from sentinel well MW-25D and in the second semi-annual sample collected from downgradient well MW-24 at concentrations ranging from 6.5 µg/L in the second semi-annual sample collected from MW-24 to 23.1 µg/L in the first semi-annual sample collected from sentinel well MW-25D.

5.22 Nickel

Nickel was detected at estimated concentrations above the MDL in both semi-annual samples collected from upgradient well MW-29D; downgradient wells MW-27D and MW-33; and sentinel wells MW-25S, MW-25D, MW-26D, and MW-27S and the first semi-annual samples collected from downgradient wells MW-24 and MW-34 and sentinel well MW-26S. Nickel was detected at a quantified concentration above the RL in both semi-annual samples collected from sentinel well MW-28 at concentrations of 11.3 µg/L and 12.1 µg/L, respectively.

5.23 Nitrate

Nitrate was detected at estimated concentrations above the MDL in the first semi-annual samples collected from upgradient well MW-11 and sentinel wells MW-25S and MW-26S and in the second semi-annual samples collected from upgradient wells MW-29S and MW-29D, downgradient well MW-27D, and sentinel well MW-28. Nitrate was detected at quantified concentrations above the RL in the both semi-annual samples collected from downgradient well MW-33 and in the first semi-annual sample from upgradient well MW-29S and sentinel well MW-28 at concentrations ranging from 0.14 mg/L in the first semi-annual sample collected from MW-33 to 1.3 mg/L in the first semi-annual sample collected from upgradient well MW-29S.

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 7.12 S.U. in the second semi-annual sample collected from upgradient well MW-29D.

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-29D and MW-29S; downgradient wells MW-24 and MW-35; and sentinel wells MW-25D, MW-26D, MW-27S, and MW-28; and the second semi-annual samples collected from downgradient well MW-27D and sentinel wells MW-25S and MW-26S. Radium 226 and 228 (combined) was detected at concentrations ranging from 0.312 picoCuries per liter (pCi/L) in the second semi-annual sample collected from sentinel well MW-26S to 2.45 pCi/L in the second semi-annual sample collected from upgradient well MW-29D.

5.26 Selenium

Selenium was not detected in 2024 samples.

5.27 Silver

Silver was detected at estimated concentrations above the MDL in both semi-annual samples collected from downgradient well MW-27D and sentinel wells MW-25S, MW-26D, and MW-27S and the second semi-annual sample collected from downgradient well MW-34. Silver was detected at a quantified concentration above the RL of 5.8 µg/L in the first semi-annual sample collected from sentinel well MW-25D.

5.28 Sulfate

Sulfate was detected at quantified concentrations above the RL in both semi-annual samples collected from each well at concentrations ranging from 2.1 mg/L in the second semi-annual sample collected from sentinel well MW-26S to 191 mg/L in the first semi-annual sample collected from MW-27D.

5.29 Thallium

Thallium was not detected in 2024 samples.

5.30 Tin

Tin was detected at estimated concentrations above the MDL in the both semi-annual samples collected from sentinel well MW-25S and in the second semi-annual samples from upgradient well MW-29D and downgradient well MW-33. Tin was not detected above the RL in 2024 samples.

5.31 Total Dissolved Solids

Total dissolved solids (TDS) were detected at quantified concentrations above the RL in both semi-annual samples collected from each well at concentrations ranging from 104 mg/L in the second semi-annual sample collected from sentinel well MW-26S to 694 mg/L in the second semi-annual sample collected from MW-27D.

5.32 Vanadium

Vanadium was detected at estimated concentrations above the MDL in both semi-annual samples collected from downgradient well MW-33, and sentinel wells MW-27S and MW-28. Vanadium was detected at a quantified concentration above the laboratory RL in both semi-annual samples collected from upgradient well MW-11 at concentrations of 15.9 µg/L and 11.2 µg/L, respectively.

5.33 Zinc

Zinc was detected at estimated concentrations above the MDL in both semi-annual samples collected from upgradient well MW-29D, downgradient well MW-27D, and sentinel well MW-25D and in the first semi-annual sample collected from sentinel well MW-25S. Zinc was detected at quantified concentrations above the RL in both

semi-annual samples collected from MW-33 and in the first semi-annual sample from downgradient well MW-24 at concentrations ranging from 12.0 µg/L in the first semi-annual sample from MW-24 to 18.9 µg/L in the second semi-annual sample from MW-33.

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 and a duplicate sample that was collected from well MW-35. These QA/QC samples were analyzed for the same constituents as the groundwater 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 were within acceptable limits, with exceptions as described below. It is noted that several reported results for combined radium were qualified as estimated (J), estimated as biased high (J+), and/or not detected (U) based on field blank contamination, laboratory blank contamination, and/or chemical yield outside of acceptance limits. Several reported results for boron were qualified as not detected (U) due to field blank contamination, and several reported results for copper were also qualified as not detected (U) based on laboratory blank contamination. Finally, several reported results for hexavalent chromium were qualified as estimated (J) or as an estimated non-detect (UJ) based on exceeded hold times. In accordance with ESI data validation protocol, sample results analyzed more than twice the method-required holding time (> 48 hours) would be considered unusable, however, the hexavalent chromium results are considered usable (with qualification), as the samples were analyzed within 48 hours of sample collection. Based on ESI's review of the analytical results and laboratory-provided QC data, the laboratory results meet the project data quality objectives with noted qualifications and are suitable for use.

6.1.1 First Semi-Annual 2024 Verification Event Findings

The laboratory and field QA/QC data for the first semi-annual 2024 verification sampling event collected April 11, 2024, were reviewed in accordance with EPA protocol by ESI. The field QA/QC samples for this event included a field blank sample. The laboratory certificates of analysis are presented in Appendix E.2 and the data validation report is presented in Appendix G.2.

As presented in Appendix G.2, laboratory QC results were within acceptable limits with the exception of zinc from MW-24, which was qualified as not detected (U) due to laboratory 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 August 26-27, 2024, were reviewed in accordance with EPA protocol by ESI. The field QA/QC samples for this event included a field blank and a duplicate sample that was collected from well MW-24. These QA/QC samples were analyzed for the same constituents as the groundwater samples. A description of the laboratory QA/QC data associated with the August 2024 groundwater monitoring event is presented in Appendix G.3.

As presented in Appendix G.3, laboratory QC results (with exceptions listed below) were within acceptable limits. It is noted that select reported results for hexavalent chromium were qualified as estimated (J) or as an estimated non-detect (UJ) based on field blank contamination, matrix spike/matrix spike duplicate (MS/MSD) recoveries outside of acceptable limits, and/or exceeded hold times. Results for nitrate were also qualified as estimated (J) or as an estimated non-detect (UJ) based on exceeded hold times. In accordance with ESI data validation protocol, sample results analyzed more than twice the method-required holding time are considered unusable; however, the results were determined to be usable (with qualification) as the samples were analyzed within 48 hours of sample collection. Combined results for radium were qualified as estimated, as estimated biased high (J+), or not detected (U) based on field duplicate imprecision and/or chemical yield outside of acceptable limits. Iron results from MW-26S were qualified as not detected (U) due to laboratory 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.

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 against established Unit 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 for compliance wells during the 2024 first semi-annual groundwater monitoring event (see Table 1):

- Boron (MW-24, MW-27D, MW-33, MW-34, MW-35)
- Calcium (MW-24, MW-27D, MW-33, MW-35)
- Total Dissolved Solids (MW-27D)

Additionally, the following SSIs for DMP constituents over background were identified for sentinel wells during the 2024 first semi-annual groundwater monitoring event (see Table 1):

- Boron (MW-27S, MW-28)
- Calcium (MW-27S, MW-28)
- Fluoride (MW-25S)
- Total Dissolved Solids (MW-27S)

Consistent with §257.93(h) of the CCR Rule, WSP evaluated the AMP constituent detections 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 AMP constituents (CCR Rule Appendix IV constituents) over background were identified during the 2024 first semi-annual groundwater monitoring event (see Table 1):

- Barium (MW-24, MW-34, MW-35)

- Cobalt (MW-24)
- Lithium (MW-24, MW-27D, MW-33, MW-34, MW-35)

Additionally, the following background SSIs for Modified AMP constituents were identified in sentinel wells during the 2024 first semi-annual groundwater monitoring event based on a value-to-value comparison (see Table 1):

- Barium (MW-26D, MW-27S, MW-28)
- Cobalt (MW-25S)
- Fluoride (MW-25S)
- Lead (MW-25D)
- Lithium (MW-25D, MW-26D, MW-27S)
- Molybdenum (MW-25D)

In addition to the above CCR Rule Appendix IV SSIs, a background SSI for SWP constituent copper was identified in the sample collected from MW-24, nickel in sentinel well MW-28, and zinc was in well MW-33.

A notification of the background SSIs listed in this section 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 Unit's SWP and §257.93(h) of the CCR Rule, WSP evaluated the DMP constituent detections 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 for compliance wells during the 2024 second semi-annual groundwater monitoring event based on a value-to-value comparison (see Table 3):

- Boron (MW-24, MW-27D, MW-33, MW-34, MW-35)
- Calcium (MW-24, MW-27D, MW-33, MW-35)
- Total Dissolved Solids (MW-27D)

Additionally, the following background SSIs for DMP constituents were identified for sentinel wells during the 2024 second semi-annual groundwater monitoring event based on a value-to-value comparison (see Table 3):

- Boron (MW-27S, MW-28)
- Calcium (MW-27S, MW-28)
- Total Dissolved Solids (MW-27S)

Consistent with §257.93(h) of the CCR Rule, WSP evaluated the AMP constituent detections 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 AMP constituents (CCR Rule Appendix IV constituents) over background were identified in compliance wells during the 2024 second semi-annual groundwater monitoring event based on a value-to-value comparison (see Table 3):

- Barium (MW-24, MW-34, MW-35)
- Cobalt (MW-24)
- Lithium (MW-24, MW-27D, MW-33, MW-34, MW-35)

The following background SSIs for AMP constituents were identified in sentinel wells during the 2024 second semi-annual groundwater monitoring event based on a value-to-value comparison (see Table 3):

- Barium (MW-26D, MW-27S, MW-28)
- Cobalt (MW-25S)
- Lithium (MW-25D, MW-26D, MW-27S)
- Molybdenum (MW-25D)

In addition to the above CCR Rule Appendix IV SSIs, background SSIs were identified for SWP constituent nickel in sentinel well MW-28 and for zinc in well MW-33.

A notification of these SSIs was submitted to the DEQ on November 26, 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 monitoring 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	Verification Concentration
Cobalt (µg/L)	6	MW-24	60.4	NS
Zinc (µg/L)	11.5	MW-24	12.0	< 3.2
		MW-33	17.4	NS

Notes: µg/L = Microgram per liter NS = Not Sampled
QL = Quantitation Limit

As presented, the suspected zinc concentration in the sample collected from well MW-24 was not confirmed with verification sampling (see Table 2). A notification of these SWP GPS exceedances was submitted to the DEQ on May 15, 2024, pursuant to Section XI.H.4.a of the SWP. Dominion Energy previously completed a Nature and Extent Study (NES) and an Assessment of Corrective Measures (ACM) for cobalt on November 10, 2020 (revised April 25, 2024), consistent with 9VAC20-81-260 *et seq*. of the VSWMR. Dominion Energy also addressed the zinc SWP GPS exceedance with the April 2024 NES/ACM revision.

7.2.1.1 VSWMR Sentinel Well SWP GPS Evaluation

Consistent with Section XI.H.2 of the Station's SWP, WSP evaluated the Modified AMP constituents (CCR Rule Appendix IV constituents, VSWMR metals, and boron) against DEQ-approved GPS. Based on this evaluation, the following SWP GPS SSIs were identified in sentinel wells 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	Verification Concentration
Nickel (µg/L)	QL	MW-28	11.3	NS
Silver (µg/L)	QL	MW-25D	5.8	< 0.49

Notes: µg/L = Microgram per liter
QL = Quantitation Limit
NS = Not Sampled

As presented, the suspected silver concentration in the sample collected at sentinel well MW-25D was not confirmed with verification sampling (see Table 2). Dominion Energy previously completed a NES and an ACM for nickel on November 10, 2020 (revised April 25, 2024), consistent with 9VAC20-81-260 *et seq*. of the VSWMR.

7.2.2 CCR GWPS Evaluation

WSP evaluated the AMP constituent detections (CCR Rule Appendix IV constituents) against the established 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	Federal CCR GWPS	Assessment Monitoring Well	1st Semi-Annual 2024 Concentration
Cobalt (µg/L)	6	MW-24	60.4

Note: µg/L = Microgram per liter

A notification of this federal CCR GWPS exceedance 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 previously completed an NES and ACM addendum for cobalt at MW-24 on November 10, 2020 (revised April 25, 2024), consistent with §257.96 of the CCR Rule.

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 for 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-24	47.3
Zinc (µg/L)	11.5	MW-33	18.9

Notes: µg/L = Micrograms per Liter
QL = Quantitation Limit

Dominion Energy previously completed an NES and an ACM for cobalt on November 10, 2020 (revised April 25, 2024), consistent with 9VAC20-81-260 *et seq*. of the VSWMR. Dominion Energy also addressed the zinc SWP GPS exceedance with the April 2024 NES/ACM revision. 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.

7.3.1.1 VSWMR Sentinel Well SWP GPS Evaluation

Consistent with Section XI.H.2 of the Station's SWP, WSP evaluated the 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
Nickel (µg/L)	QL	MW-28	12.1

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

Dominion Energy previously completed a NES and an ACM for nickel on November 10, 2020 (revised April 25, 2024), consistent with 9VAC20-81-260 *et seq*. of the VSWMR. A notification of these SWP GPS SSIs was submitted to the DEQ on November 26, 2024, pursuant to Section XI.H.4.a of the SWP.

7.3.2 CCR GWPS Evaluation

WSP evaluated the AMP constituents (CCR Rule Appendix IV constituents) against the established federal CCR GWPS. Based on this evaluation, the following federal CCR GWPS exceedances were identified during the 2024 second semi-annual groundwater monitoring event.

Constituent	Federal CCR GWPS	Monitoring Well	2nd Semi-Annual 2024 Concentration
Cobalt (µg/L)	6	MW-24	47.3

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

A notification of this federal CCR GWPS exceedance 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 previously completed an NES and ACM addendum for cobalt at MW-24 on November 10, 2020 (revised April 25, 2024), consistent with §257.96 of the CCR Rule.

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 19 feet/year in the saprolite and at an estimated horizontal velocity of 725 feet/year in the 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 background for barium, boron, calcium, cobalt, copper, lithium, TDS, and zinc in one (1) or more compliance wells;
- SWP GPS SSIs were identified for cobalt and zinc in one (1) or more compliance wells;
- A federal CCR GWPS SSI was identified for cobalt in one (1) well; 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 Modified AMP activities, 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 [§257.95(a) and 257.105(h)(12)], Dominion Energy will continue to prepare the semi-annual progress reports for remedy design and selection. In accordance with the provisions in Virginia Code section 10.1-1402.03, Dominion Energy will continue with the planned closure by removal of CCR material in the North Pond.

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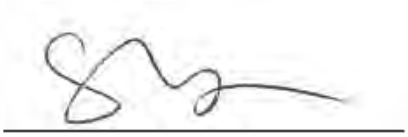
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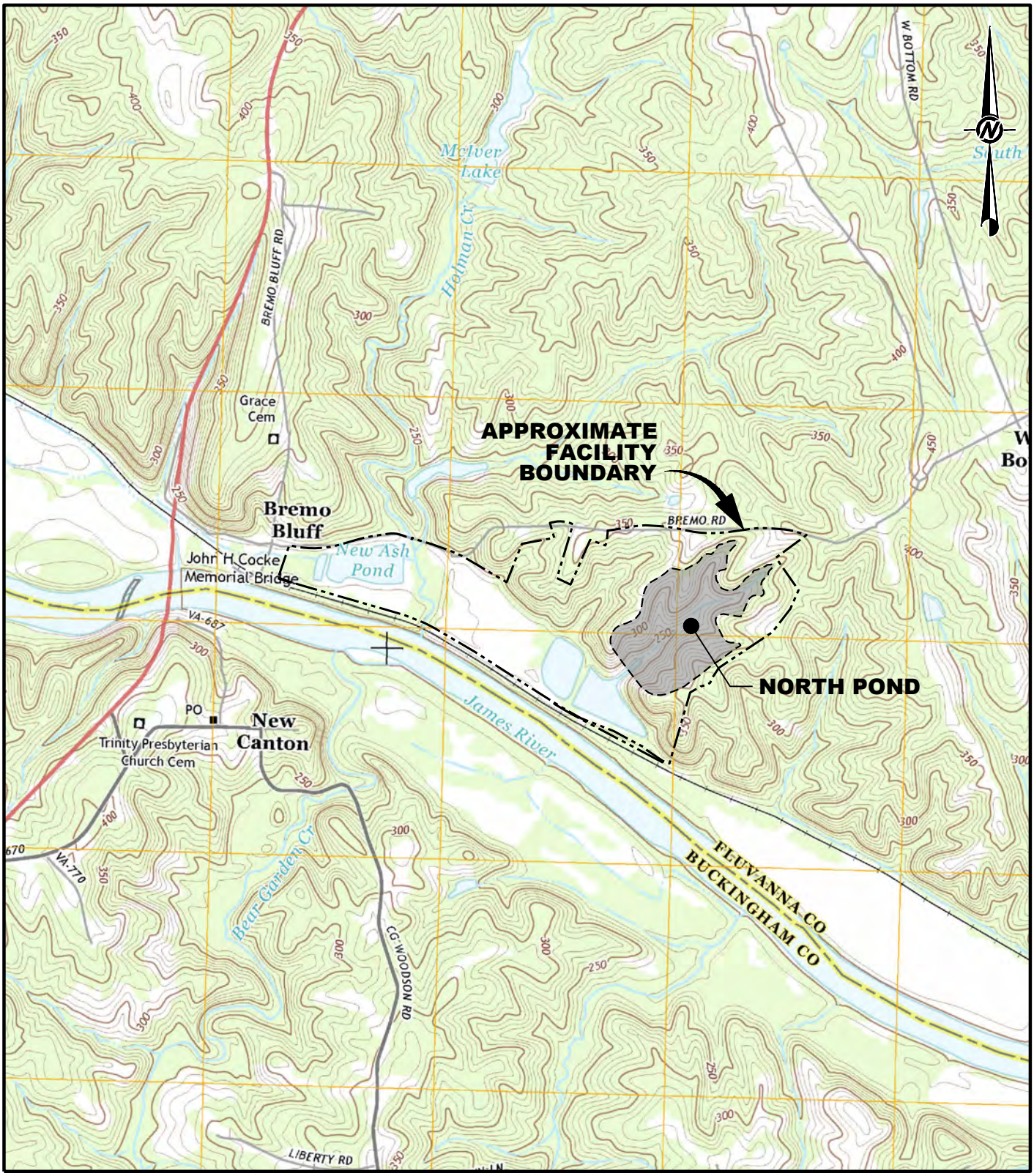
10.0 SIGNATURE SECTION

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), the DEQ SWP No. 618 (DEQ, 2019), and the CCR Rule.

Signature	Name & Title
	Crystal Shadle Assistant Vice President, Geologist
	Catherine Pezzaro, CPG Senior Consultant, Geologist

https://wsponlinenam.sharepoint.com/sites/us-rvadominion/shared documents/bremo/31406066.001 bremo gw 2023/6 deliverables/2024-01-xx np amr/2024-xx-xx bremo north pond ccr+vswmr agwmr.docx

FIGURES



REFERENCE

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

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

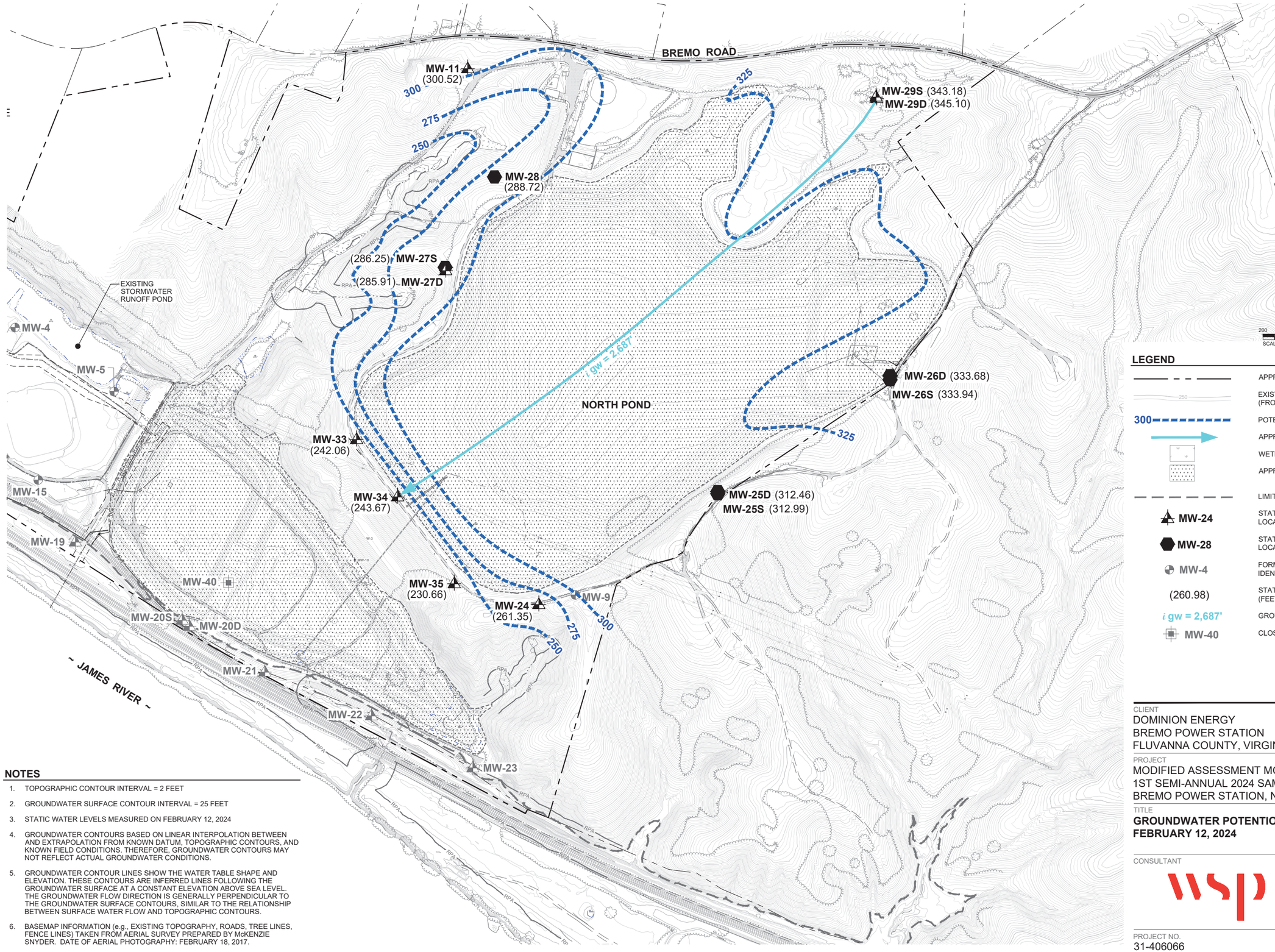
PROJECT
BREMO POWER STATION
NORTH POND
FLUVANNA COUNTY, VIRGINIA

TITLE
SITE LOCATION MAP

PROJECT NO. 31406066.009
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FIGURE 1

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NOTES

1. TOPOGRAPHIC CONTOUR INTERVAL = 2 FEET
2. GROUNDWATER SURFACE CONTOUR INTERVAL = 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.

SCALE 200 0 200 400 FEET

LEGEND

- APPROXIMATE PROPERTY BOUNDARY
- EXISTING TOPOGRAPHIC CONTOURS (2' INTERVALS) (FROM AERIAL SURVEY - SEE NOTE 6)
- 300 POTENTIOMETRIC SURFACE CONTOURS
- APPROXIMATE GROUNDWATER FLOW LINE
- WETLANDS
- APPROXIMATE LIMITS OF EXISTING ASH PONDS
- LIMITS OF 100-YR FLOOD PLAIN
- MW-24 STATE SWP & FEDERAL CCR RULE COMPLIANCE WELL LOCATION AND IDENTIFICATION
- MW-28 STATE SENTINEL WELL LOCATION AND IDENTIFICATION
- MW-4 FORMER VPDES MONITORING WELL LOCATION AND IDENTIFICATION
- (260.98) STATIC GROUNDWATER ELEVATION (FEET ABOVE MEAN SEA LEVEL)
- i gw = 2,687' GROUNDWATER FLOW PATH LENGTH (FEET)
- MW-40 CLOSURE DEMONSTRATION WELL

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FLUVANNA COUNTY, VIRGINIA

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

TITLE
GROUNDWATER POTENTIOMETRIC SURFACE MAP
FEBRUARY 12, 2024

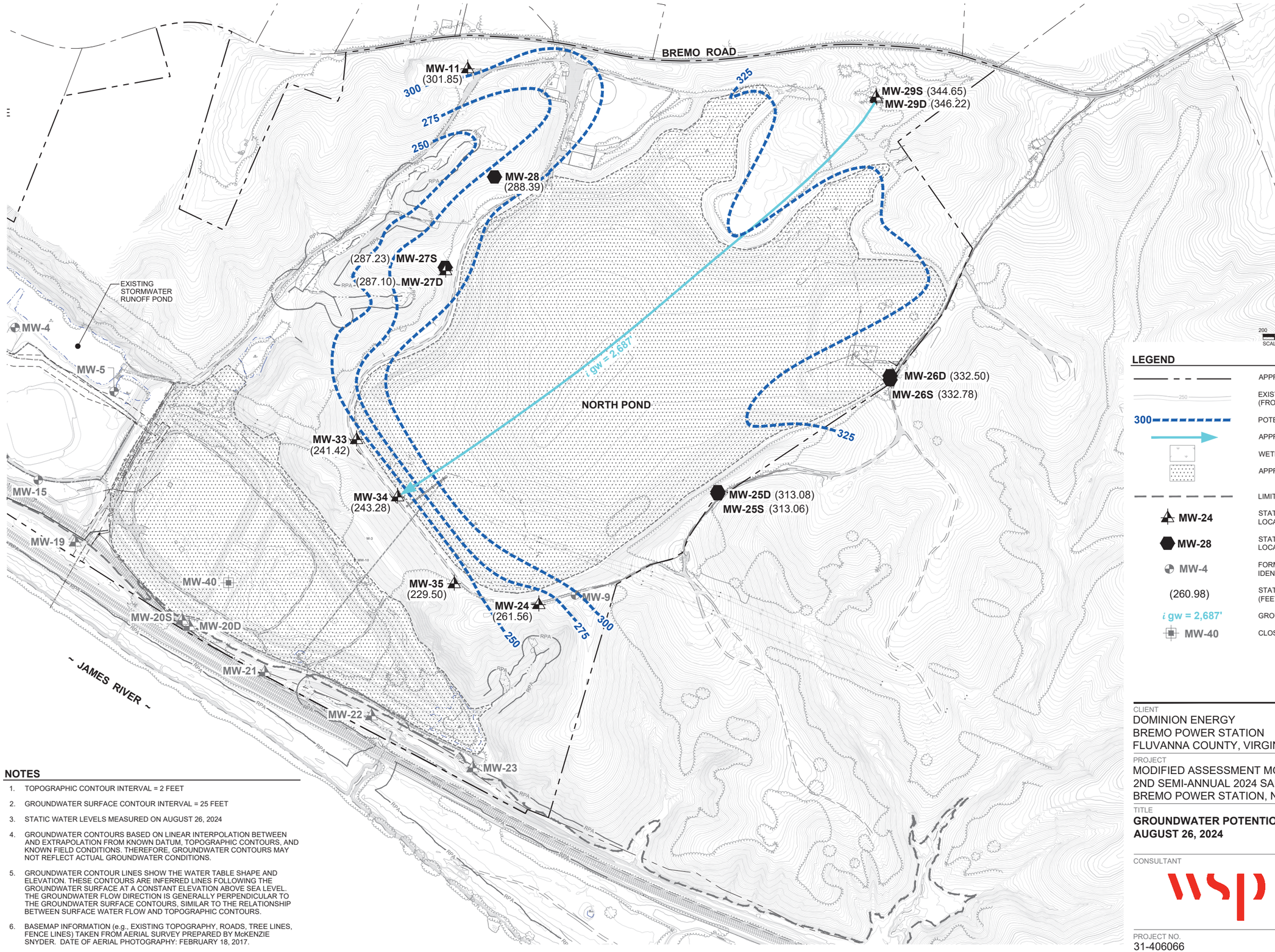
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DESIGNED	MK
PREPARED	SIB
REVIEWED	CKS
APPROVED	CKS

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

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LEGEND

- APPROXIMATE PROPERTY BOUNDARY
- EXISTING TOPOGRAPHIC CONTOURS (2' INTERVALS) (FROM AERIAL SURVEY - SEE NOTE 6)
- 300 POTENTIOMETRIC SURFACE CONTOURS
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- i gw = 2,687' GROUNDWATER FLOW PATH LENGTH (FEET)
- MW-40 CLOSURE DEMONSTRATION WELL

NOTES

1. TOPOGRAPHIC CONTOUR INTERVAL = 2 FEET
2. GROUNDWATER SURFACE CONTOUR INTERVAL = 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.
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.

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FLUVANNA COUNTY, VIRGINIA

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

TITLE
GROUNDWATER POTENTIOMETRIC SURFACE MAP
AUGUST 26, 2024

CONSULTANT
wsp

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DESIGNED	MK
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 North Pond Groundwater First Semi-annual Sampling Event (February 2024)
Bremo Power Station, North Pond
Permit No 618

					Upgradient Wells												Downgradient Wells			
				Sample ID:	MW-11				MW-29S				MW-29D				MW-24			
				Sample Date:	2/12/2024				2/12/2024				2/12/2024				2/14/2024			
Parameter Name	**Units**	**Site Specific Background[1]**	**Federal GWPS[1]**	**SWP GPS[1]**	**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	**195**		4.0	50.0
Calcium	µg/L	48,900	--	--	**19900**		14.7	100	**7310**		14.7	100	**42200**		14.7	100	**62400**		14.7	100
Chloride	mg/L	102.2	--	--	**11.4**		0.60	1.0	**10.9**		0.60	1.0	**42.1**		0.60	1.0	**16.8**		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	**0.12**		0.050	0.10	**0.061**	J	0.050	0.10
pH	SU	4.94-8.84	--	--	5.02		--	--	5.62		--	--	7.05		--	--	6.37		--	--
Sulfate	mg/L	237.8	--	--	**6.3**		0.50	1.0	**7.5**		0.50	1.0	**26.4**		0.50	1.0	**36.7**		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	**305**		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
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
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	**69.4**		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
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
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
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	**60.4**		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	**0.061**	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	**0.13**	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	**2.7**		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
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	**4.3**	J	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
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
Radium 226 and 226 (Combined)	pCi/L	4.254	5	5	0.717	U	--	--	**0.635**	J	--	--	**1.44**	J	--	--	**2.23**	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	**10.1**		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	**1.3**	J	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
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
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
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	**12.0**		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
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	**0.53**		0.031	0.10
Hardness	µg/L	--	--	--	**103000**		36.8	662	**24200**		36.8	662	**147000**		36.8	662	**200000**		36.8	662
Iron	µg/L	--	--	--	**313**		20.9	50.0	**84.1**		20.9	50.0	**418**		20.9	50.0	**5980**		105	250
Manganese	µg/L	--	--	--	**3.0**		1.0	2.0	**4.9**		1.0	2.0	**913**		10.2	20.0	**3130**		20.4	40.0
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
Field Parameters																				
Conductivity	µS/cm	--	--	--	241.4		0.1	0.1	136.7		0.1	0.1	794		0.1	0.1	557		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	0.46		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	-24.2		0.1	0.1
Temperature	C	--	--	--	14.5		0.1	0.1	12.3		0.1	0.1	13.6		0.1	0.1	14.2		0.1	0.1
Turbidity	NTU	--	--	--	9.6		0.01	0.01	9.43		0.01	0.01	6.88		0.01	0.01	9.21		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
J+ = The result is an estimated quantity; the results may be biased high
U = The analyte was not detected above the level of the sample reporting limit.
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= 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 North Pond Groundwater First Semi-annual Sampling Event (February 2024)
Bremo Power Station, North Pond
Permit No 618

					Downgradient Wells															
					Sample ID:	MW-27D				MW-33				MW-34				MW-35			
					Sample Date:	2/14/2024				2/14/2024				2/13/2024				2/14/2024			
Parameter Name	**Units**	**Site Specific Background[1]**	**Federal GWPS[1]**	**SWP GPS[1]**		**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		**1180**		4.0	50.0	**269**		4.0	50.0	**1400**		4.0	50.0	**557**		4.0	50.0
Calcium	µg/L	48,900	--	--		**67100**		14.7	100	**75000**		14.7	100	**35300**		14.7	100	**56200**		14.7	100
Chloride	mg/L	102.2	--	--		**12.3**		0.60	1.0	**12.1**		0.60	1.0	**12.7**		0.60	1.0	**10.1**		0.60	1.0
Fluoride	mg/L	0.16	4	4		**0.13**		0.050	0.10	**0.079**	J	0.050	0.10	**0.052**	J	0.050	0.10	**0.057**	J	0.050	0.10
pH	SU	4.94-8.84	--	--		6.13		--	--	6.64		--	--	6.11		--	--	6.16		--	--
Sulfate	mg/L	237.8	--	--		**191**		2.0	4.0	**30.9**		0.50	1.0	**37.4**		0.50	1.0	**36.0**		0.50	1.0
Total Dissolved Solids	mg/L	580	--	--		**666**		50.0	50.0	**329**		10.0	10.0	**254**		10.0	10.0	**285**		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
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
Barium	µg/L	40.4	2,000	2,000		**22.4**		0.79	5.0	**15.7**		0.79	5.0	**40.8**		0.79	5.0	**77.2**		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
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
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	**1.3**	J	0.63	5.0
Cobalt	µg/L	1.57	6	6		**0.45**	J	0.050	1.0	**0.074**	J	0.050	1.0	< 0.050	U	0.050	1.0	**0.45**	J	0.050	1.0
Fluoride	mg/L	0.16	4	4		**0.13**		0.050	0.10	**0.079**	J	0.050	0.10	**0.052**	J	0.050	0.10	**0.057**	J	0.050	0.10
Lead	µg/L	QL	15*	15		< 0.077	U	0.077	1.0	**0.11**	J	0.077	1.0	< 0.077	U	0.077	1.0	< 0.077	U	0.077	1.0
Lithium	µg/L	QL	40	40		**26.5**		0.50	2.5	**3.5**		0.50	2.5	**7.1**		0.50	2.5	**19.8**		0.50	2.5
Mercury	µg/L	QL	2	2		< 0.12	U	0.12	0.20	< 0.12	U	0.12	0.20	**0.15**	J	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
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
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
Radium 226 and 226 (Combined)	pCi/L	4.254	5	5		0.884	U	--	--	0.729	U	--	--	0.171	U	--	--	**2.38**	J+	--	--
VSWMR Constituents																					
Copper	µg/L	QL	--	1,300*		< 1.2	U	1.2	5.0	< 3.0	U	3.0	5.0	< 0.62	U	0.62	5.0	< 0.62	U	0.62	5.0
Nickel	µg/L	QL	--	QL		**1.8**	J	0.88	5.0	**1.3**	J	0.88	5.0	**0.90**	J	0.88	5.0	< 0.88	U	0.88	5.0
Silver	µg/L	QL	--	QL		**1.4**	J	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
Vanadium	µg/L	19.1	--	19.1		< 1.6	U	1.6	5.0	**2.0**	J	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		**8.3**	J	3.0	10.0	**17.4**		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	--	--		**0.025**		0.025	0.025	**0.060**		0.025	0.025	**0.31**	J	0.050	0.050	< 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	**0.045**	J	0.031	0.10	< 0.031	U	0.031	0.10
Hardness	µg/L	--	--	--		**292000**		36.8	662	**250000**		36.8	662	**143000**		36.8	662	**181000**		36.8	662
Iron	µg/L	--	--	--		**462**		20.9	50.0	**85.7**		20.9	50.0	< 20.9	U	20.9	50.0	**1710**		20.9	50.0
Manganese	µg/L	--	--	--		**212**		2.0	4.0	**17.6**		1.0	2.0	**4.3**		1.0	2.0	**726**		5.1	10.0
Nitrate	mg/L	--	--	--		< 0.060	U	0.060	0.10	**0.14**		0.060	0.10	< 0.060	U	0.060	0.10	< 0.060	U	0.060	0.10
Field Parameters																					
Conductivity	µS/cm	--	--	--		1034		0.1	0.1	572		0.1	0.1	378.6		0.1	0.1	467.9		0.1	0.1
Dissolved Oxygen	mg/L	--	--	--		0.81		0.01	0.01	4.77		0.01	0.01	1.47		0.01	0.01	0.53		0.01	0.01
Oxidation Reduction Potential	millivolts	--	--	--		69.2		0.1	0.1	62.1		0.1	0.1	523.2		0.1	0.1	36.4		0.1	0.1
Temperature	C	--	--	--		15.3		0.1	0.1	15.2		0.1	0.1	15.0		0.1	0.1	14.4		0.1	0.1
Turbidity	NTU	--	--	--		2.5		0.01	0.01	3.19		0.01	0.01	1.14		0.01	0.01	9.7		0.01	0.01

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= Concentration greater than site-specific background

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Table 1
Summary of North Pond Groundwater First Semi-annual Sampling Event (February 2024)
Bremo Power Station, North Pond
Permit No 618

					Sentinel Wells															
				Sample ID:	MW-25S				MW-25D				MW-26S				MW-26D			
				Sample Date:	2/13/2024				2/13/2024				2/13/2024				2/13/2024			
Parameter Name	**Units**	**Site Specific Background[1]**	**Federal GWPS[1]**	**SWP GPS[1]**	**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	< 19.0	U	19.0	50.0	< 21.4	U	21.4	50.0	< 4.0	U	4.0	50.0	< 5.7	U	5.7	50.0
Calcium	µg/L	48,900	--	--	**39800**		14.7	100	**27900**		14.7	100	**8520**		14.7	100	**44200**		14.7	100
Chloride	mg/L	102.2	--	--	**8.5**		0.60	1.0	**8.8**		0.60	1.0	**2.7**		0.60	1.0	**10.6**		0.60	1.0
Fluoride	mg/L	0.16	4	4	**0.19**		0.050	0.10	< 0.050	U	0.050	0.10	< 0.050	U	0.050	0.10	< 0.050	U	0.050	0.10
pH	SU	4.94-8.84	--	--	6.55		--	--	6.42		--	--	5.48		--	--	6.18		--	--
Sulfate	mg/L	237.8	--	--	**14.5**		0.50	1.0	**19.7**		0.50	1.0	**2.6**		0.50	1.0	**48.5**		0.50	1.0
Total Dissolved Solids	mg/L	580	--	--	**232**		10.0	10.0	**178**		10.0	10.0	**105**		10.0	10.0	**284**		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
Arsenic	µg/L	QL	10	10	< 2.5	U	2.5	10.0	**2.5**	J	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	**18.1**		0.79	5.0	**31.9**		0.79	5.0	**20.7**		0.79	5.0	**198**		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
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
Chromium	µg/L	QL	100	100	< 0.63	U	0.63	5.0	**3.0**	J	0.63	5.0	**0.66**	J	0.63	5.0	< 0.63	U	0.63	5.0
Cobalt	µg/L	1.57	6	6	**4.0**		0.050	1.0	**1.1**		0.050	1.0	< 0.050	U	0.050	1.0	**1.1**		0.050	1.0
Fluoride	mg/L	0.16	4	4	**0.19**		0.050	0.10	< 0.050	U	0.050	0.10	< 0.050	U	0.050	0.10	< 0.050	U	0.050	0.10
Lead	µg/L	QL	15*	15	**0.18**	J	0.077	1.0	**1.3**		0.077	1.0	< 0.077	U	0.077	1.0	< 0.077	U	0.077	1.0
Lithium	µg/L	QL	40	40	**0.92**	J	0.50	2.5	**3.0**		0.50	2.5	**0.88**	J	0.50	2.5	**5.0**		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
Molybdenum	µg/L	9.3	100	100	< 2.6	U	2.6	5.0	**23.1**		2.6	5.0	< 2.6	U	2.6	5.0	**4.0**	J	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
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
Radium 226 and 226 (Combined)	pCi/L	4.254	5	5	0.938	U	--	--	**2.12**	J	--	--	0.379	U	--	--	**0.538**	J	--	--
VSWMR Constituents																				
Copper	µg/L	QL	--	1,300*	**1.7**	J	0.62	5.0	**3.7**	J	0.62	5.0	< 0.62	U	0.62	5.0	**1.0**	J	0.62	5.0
Nickel	µg/L	QL	--	QL	**2.0**	J	0.88	5.0	**2.9**	J	0.88	5.0	**0.93**	J	0.88	5.0	**1.2**	J	0.88	5.0
Silver	µg/L	QL	--	QL	**4.2**	J	0.49	5.0	**5.8**		0.49	5.0	< 0.49	U	0.49	5.0	**0.52**	J	0.49	5.0
Tin	µg/L	QL	--	QL	**0.74**	J	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
Zinc	µg/L	11.5	--	11.5	**4.9**	J	3.0	10.0	**5.6**	J	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	--	--	**0.032**		0.025	0.025	< 0.025	U	0.025	0.025	**0.22**	J	0.025	0.025	< 0.025	UJ	0.025	0.025
Former VPDES Constituents																				
Ammonia	mg/L	--	--	--	< 0.031	U	0.031	0.10	< 0.031	U	0.031	0.10	< 0.031	U	0.031	0.10	**0.21**		0.031	0.10
Hardness	µg/L	--	--	--	**142000**		36.8	662	**90100**		36.8	662	**27700**		36.8	662	**147000**		36.8	662
Iron	µg/L	--	--	--	**1120**		20.9	50.0	**1210**		20.9	50.0	**48.3**	J	20.9	50.0	**2720**		20.9	50.0
Manganese	µg/L	--	--	--	**332**		3.1	6.0	**159**		1.0	2.0	**5.0**		1.0	2.0	**1180**		10.2	20.0
Nitrate	mg/L	--	--	--	**0.071**	J	0.060	0.10	< 0.060	U	0.060	0.10	**0.061**	J	0.060	0.10	< 0.060	U	0.060	0.10
Field Parameters																				
Conductivity	µS/cm	--	--	--	358.6		0.1	0.1	239.4		0.1	0.1	107.5		0.1	0.1	423.2		0.1	0.1
Dissolved Oxygen	mg/L	--	--	--	2.48		0.01	0.01	1.23		0.01	0.01	8.78		0.01	0.01	2.52		0.01	0.01
Oxidation Reduction Potential	millivolts	--	--	--	37.7		0.1	0.1	30.0		0.1	0.1	165.9		0.1	0.1	30.0		0.1	0.1
Temperature	C	--	--	--	13.8		0.1	0.1	13.7		0.1	0.1	14.5		0.1	0.1	14.8		0.1	0.1
Turbidity	NTU	--	--	--	8.57		0.01	0.01	8.67		0.01	0.01	4.5		0.01	0.01	5.7		0.01	0.01

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Summary of North Pond Groundwater First Semi-annual Sampling Event (February 2024)
Bremo Power Station, North Pond
Permit No 618

					Sentinel Wells								Field Quality Control Samples							
					Sample ID:	MW-27S				MW-28				MW-35 Field Duplicate				Field Blank			
					Sample Date:	2/13/2024				2/14/2024				2/14/2024				2/12/2024			
Parameter Name	**Units**	**Site Specific Background[1]**	**Federal GWPS[1]**	**SWP GPS[1]**		**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		**1500**		4.0	50.0	**231**		4.0	50.0	**580**		4.0	50.0	**24.0**	J	4.0	50.0
Calcium	µg/L	48,900	--	--		**122000**		147	1000	**54900**		14.7	100	**57800**		14.7	100	< 14.7	U	14.7	100
Chloride	mg/L	102.2	--	--		**11.2**		0.60	1.0	**9.1**		0.60	1.0	**10.1**		0.60	1.0	< 0.60	U	0.60	1.0
Fluoride	mg/L	0.16	4	4		**0.054**	J	0.050	0.10	< 0.050	U	0.050	0.10	**0.055**	J	0.050	0.10	< 0.050	U	0.050	0.10
pH	SU	4.94-8.84	--	--		6.44		--	--	6.00		--	--	--		--	--	--		--	--
Sulfate	mg/L	237.8	--	--		**153**		1.5	3.0	**97.3**		0.50	1.0	**36.0**		0.50	1.0	< 0.50	U	0.50	1.0
Total Dissolved Solids	mg/L	580	--	--		**670**		10.0	10.0	**343**		10.0	10.0	**288**		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
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
Barium	µg/L	40.4	2,000	2,000		**85.6**		0.79	5.0	**42.6**		0.79	5.0	**80.3**		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
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
Chromium	µg/L	QL	100	100		< 0.63	U	0.63	5.0	**1.4**	J	0.63	5.0	**1.4**	J	0.63	5.0	< 0.63	U	0.63	5.0
Cobalt	µg/L	1.57	6	6		**0.18**	J	0.050	1.0	**0.14**	J	0.050	1.0	**0.44**	J	0.050	1.0	< 0.050	U	0.050	1.0
Fluoride	mg/L	0.16	4	4		**0.054**	J	0.050	0.10	< 0.050	U	0.050	0.10	**0.055**	J	0.050	0.10	< 0.050	U	0.050	0.10
Lead	µg/L	QL	15*	15		< 0.077	U	0.077	1.0	**0.20**	J	0.077	1.0	< 0.077	U	0.077	1.0	< 0.077	U	0.077	1.0
Lithium	µg/L	QL	40	40		**5.9**		0.50	2.5	**1.4**	J	0.50	2.5	**18.8**		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
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
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
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
Radium 226 and 226 (Combined)	pCi/L	4.254	5	5		**0.932**	J	--	--	**0.614**	J	--	--	**2.03**	J	--	--	**0.841**	J	--	--
VSWMR Constituents																					
Copper	µg/L	QL	--	1,300*		**1.4**	J	0.62	5.0	< 0.75	U	0.75	5.0	< 0.62	U	0.62	5.0	< 0.62	U	0.62	5.0
Nickel	µg/L	QL	--	QL		**2.2**	J	0.88	5.0	**11.3**		0.88	5.0	< 0.88	U	0.88	5.0	< 0.88	U	0.88	5.0
Silver	µg/L	QL	--	QL		**0.95**	J	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
Vanadium	µg/L	19.1	--	19.1		**3.3**	J	1.6	5.0	**2.0**	J	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	< 3.0	U	3.0	10.0	< 3.0	U	3.0	10.0
Speciation of Chromium																					
Hexavalent Chromium	µg/L	13	--	--		< 0.025	UJ	0.025	0.025	**0.73**		0.12	0.12	< 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	< 0.031	U	0.031	0.10	< 0.031	U	0.031	0.10
Hardness	µg/L	--	--	--		**536000**		368	6620	**224000**		36.8	662	**187000**		36.8	662	< 36.8	U	36.8	662
Iron	µg/L	--	--	--		**124**		20.9	50.0	**368**		20.9	50.0	**1550**		20.9	50.0	< 20.9	U	20.9	50.0
Manganese	µg/L	--	--	--		**21.6**		1.0	2.0	**14.0**		1.0	2.0	**705**		5.1	10.0	< 1.0	U	1.0	2.0
Nitrate	mg/L	--	--	--		< 0.060	U	0.060	0.10	**0.27**		0.060	0.10	< 0.060	U	0.060	0.10	< 0.060	U	0.060	0.10
Field Parameters																					
Conductivity	µS/cm	--	--	--		997		0.1	0.1	519		0.1	0.1	--		--	--	--		--	--
Dissolved Oxygen	mg/L	--	--	--		1.05		0.01	0.01	1.56		0.01	0.01	--		--	--	--		--	--
Oxidation Reduction Potential	millivolts	--	--	--		142.3		0.1	0.1	118.8		0.1	0.1	--		--	--	--		--	--
Temperature	C	--	--	--		16.2		0.1	0.1	13.8		0.1	0.1	--		--	--	--		--	--
Turbidity	NTU	--	--	--		2.05		0.01	0.01	7.00		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
J+ = The result is an estimated quantity; the results may be biased high
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 First Semi-Annual Modified Assessment Monitoring Program Verification Sampling Event Data (April 2024)
Bremo Power Station, North Pond
Permit No. 618

					Downgradient Well				Sentinel Well				Field Quality Control Samples			
				Sample ID:	MW-24				MW-25D				Field Blank			
				Sample Date:	4/11/2024				4/11/2024				4/11/2024			
Parameter Name	**Units**	**Site Specific Background[1]**	**Federal CCR GWPS[1]**	**SWP GPS[1]**	**Result**	**Qualifier**	**MDL**	**RL**	**Result**	**Qualifier**	**MDL**	**RL**	**Result**	**Qualifier**	**MDL**	**RL**
Additional VSWMR Constituents																
Silver	µg/L	QL	--	QL	--		--	--	< 0.49	U	0.49	5.0	< 0.49	U	0.49	5.0
Zinc	µg/L	11.5	--	11.5	< 3.2	U	3.2	10.0	--		--	--	< 3.0	U	3.0	10.0
Field Parameters																
Conductivity	µS/cm	--	--	--	744		0.1	0.1	233.2		0.1	0.1	--		--	--
Dissolved Oxygen	mg/L	--	--	--	0.78		0.01	0.01	1.10		0.01	0.01	--		--	--
Oxidation Reduction Potential	millivolts	--	--	--	-37.0		0.1	0.1	44.1		0.1	0.1	--		--	--
pH	SU	--	--	--	6.19		0.01	0.01	6.27		0.01	0.01	--		--	--
Temperature	C	--	--	--	14.5		0.01	0.01	13.9		0.01	0.01	--		--	--
Turbidity	NTU	--	--	--	2.60		0.1	0.1	4.32		0.1	0.1	--		--	--

Notes:
MDL = Method Detection Limit
RL = Reporting Limit
µS/cm = MicroSiemen per centimeter
SU = Standard Units
C = Degrees Celsius
NTU = Nephelometric Turbidity Unit
CCR = Coal Combustion Residuals
SWP = Solid Waste Permit
GPS/GWPS = Groundwater Protection Standards

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:
U = The analyte was not detected above the level of the sample reporting limit

= Concentration greater than site-specific background

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

= Concentration greater than SWP GPS and site-specific background

Table 3
Summary of North Pond Groundwater Second Semi-Annual Sampling Event (August 2024)
Bremo Power Station, North Pond
Permit No 618

					Upgradient Wells												Downgradient Wells			
				Sample ID:	MW-11				MW-29S				MW-29D				MW-24			
				Sample Date:	8/26/2024				8/26/2024				8/26/2024				8/27/2024			
Parameter Name	**Units**	**Site Specific Background[1]**	**Federal GWPS[1]**	**SWP GPS[1]**	**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	**209**		4.0	50.0
Calcium	µg/L	48,900	--	--	**20300**		14.7	100	**7650**		14.7	100	**40600**		14.7	100	**70300**		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	**18.7**		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	< 0.050	U	0.050	0.10
pH	SU	4.94-8.84	--	--	5.14		0.01	0.01	5.35		0.01	0.01	7.12		0.01	0.01	6.39		0.01	0.01
Sulfate	mg/L	237.8	--	--	**5.0**		0.50	1.0	**9.3**		0.50	1.0	**27.3**		0.50	1.0	**39.5**		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	**347**		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
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
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	**75.1**		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
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
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
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	**47.3**		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	< 0.050	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
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	**2.7**		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
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	**6.5**		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
Thallium	µg/L	QL	2	2	< 0.028	U	0.028	0.20	< 0.026	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+	--	--	**1.64**	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	**0.65**	J	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	< 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
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
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
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
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	< 0.0043	UJ	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	**0.46**		0.031	0.10
Hardness	µg/L	--	--	--	**103000**		36.8	662	**25300**		36.8	662	**143000**		36.8	662	**220000**		36.8	662
Iron	µg/L	--	--	--	**393**		3.0	20.0	**201**		3.0	20.0	**471**		3.0	20.0	**6090**		3.0	20.0
Manganese	µg/L	--	--	--	**3.7**		0.24	2.0	**4.6**		0.24	2.0	**918**		2.4	20.0	**3210**		7.1	60.0
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	U	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	494.5		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	0.55		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	-55.5		0.1	0.1
Temperature	C	--	--	--	16.6		0.1	0.1	16.8		0.1	0.1	18.5		0.1	0.1	17.2		0.1	0.1
Turbidity	NTU	--	--	--	5.17		0.01	0.01	1.46		0.01	0.01	4.61		0.01	0.01	7.22		0.01	0.01

Notes:
MDL = Method Detection Limit
RL = Reporting Limit
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µg/L = Microgram per liter
pCi/L = picoCurie per liter
µS/cm = MicroSiemen per centimeter
SU = Standard Units
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NTU = Nephelometric Turbidity Unit
CCR = Coal Combustion Residuals
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Notes:
QL = Laboratory quantitation limit
GPS/GWPS = Groundwater Protection Standards
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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:
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J+ = The result is an estimated quantity; the results may be biased high
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 3
Summary of North Pond Groundwater Second Semi-Annual Sampling Event (August 2024)
Bremo Power Station, North Pond
Permit No 618

					Downgradient Wells													
				Sample ID:	MW-27D				MW-33				MW-34				MW-35			
				Sample Date:	8/27/2024				8/27/2024				8/27/2024				8/27/2024			
Parameter Name	**Units**	**Site Specific Background[1]**	**Federal GWPS[1]**	**SWP GPS[1]**	**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	**1350**		4.0	50.0	**273**		4.0	50.0	**1380**		4.0	50.0	**615**		4.0	50.0
Calcium	µg/L	48,900	--	--	**65000**		14.7	100	**78200**		14.7	100	**38200**		14.7	100	**54100**		14.7	100
Chloride	mg/L	102.2	--	--	**11.7**		0.60	1.0	**12.8**		0.60	1.0	**12.6**		0.60	1.0	**9.9**		0.60	1.0
Fluoride	mg/L	0.16	4	4	**0.10**		0.050	0.10	**0.065**	J	0.050	0.10	< 0.050	U	0.050	0.10	< 0.050	U	0.050	0.10
pH	SU	4.94-8.84	--	--	6.23		0.01	0.01	6.62		0.01	0.01	6.00		0.01	0.01	6.40		0.01	0.01
Sulfate	mg/L	237.8	--	--	**186**		2.0	4.0	**31.7**		0.50	1.0	**35.9**		0.50	1.0	**35.1**		0.50	1.0
Total Dissolved Solids	mg/L	580	--	--	**694**		25.0	25.0	**328**		25.0	25.0	**263**		25.0	25.0	**295**		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
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**	J	2.5	10.0
Barium	µg/L	40.4	2,000	2,000	**18.1**		0.79	5.0	**16.4**		0.79	5.0	**42.0**		0.79	5.0	**80.6**		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
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
Chromium	µg/L	QL	100	100	< 0.63	U	0.63	5.0	< 0.63	U	0.63	5.0	**0.76**	J	0.63	5.0	**1.8**	J	0.63	5.0
Cobalt	µg/L	1.57	6	6	< 0.14	U	0.14	1.0	< 0.14	U	0.14	1.0	< 0.14	U	0.14	1.0	**0.44**	J	0.14	1.0
Fluoride	mg/L	0.16	4	4	**0.10**		0.050	0.10	**0.065**	J	0.050	0.10	< 0.050	U	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
Lithium	µg/L	QL	40	40	**30.0**		0.33	2.5	**3.8**		0.33	2.5	**7.2**		0.33	2.5	**18.3**		0.33	2.5
Mercury	µg/L	QL	2	2	< 0.12	U	0.12	0.20	< 0.12	U	0.12	0.20	**0.17**	J	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
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
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
Radium 226 and 228 (Combined)	pCi/L	4.254	5	5	**1.53**	J+	--	--	0.412	U	--	--	0.216	U	--	--	**1.19**	J	--	--
VSWMR Constituents																				
Copper	µg/L	QL	--	1,300*	< 0.62	U	0.62	5.0	**1.4**	J	0.62	5.0	< 0.62	U	0.62	5.0	< 0.62	U	0.62	5.0
Nickel	µg/L	QL	--	QL	**1.7**	J	0.88	5.0	**1.0**	J	0.88	5.0	< 0.88	U	0.88	5.0	< 0.88	U	0.88	5.0
Silver	µg/L	QL	--	QL	**0.74**	J	0.49	5.0	< 0.49	U	0.49	5.0	**0.51**	J	0.49	5.0	< 0.49	U	0.49	5.0
Tin	µg/L	QL	--	QL	< 0.14	U	0.14	1.0	**0.25**	J	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	**2.3**	J	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	**5.2**	J	3.0	10.0	**18.9**		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	--	--	**0.23**	J	0.0086	0.050	< 0.087	U	0.087	0.087	**0.48**	J	0.0086	0.050	< 0.0043	UJ	0.0043	0.025
Former VPDES Constituents																				
Ammonia	mg/L	--	--	--	< 0.031	U	0.031	0.10	< 0.031	U	0.031	0.10	< 0.031	U	0.031	0.10	< 0.031	U	0.031	0.10
Hardness	µg/L	--	--	--	**286000**		36.8	662	**256000**		36.8	662	**150000**		36.8	662	**177000**		36.8	662
Iron	µg/L	--	--	--	**261**		3.0	20.0	**51.8**		3.0	20.0	**15.5**	J	3.0	20.0	**2240**		3.0	20.0
Manganese	µg/L	--	--	--	**62.5**		0.24	2.0	**12.0**		0.24	2.0	**4.5**		0.24	2.0	**652**		1.2	10.0
Nitrate	mg/L	--	--	--	**0.083**	J	0.060	0.10	**0.15**		0.060	0.10	< 0.060	U	0.060	0.10	< 0.060	U	0.060	0.10
Field Parameters																				
Conductivity	µS/cm	--	--	--	1042		0.1	0.1	506		0.1	0.1	374.1		0.1	0.1	458.2		0.1	0.1
Dissolved Oxygen	mg/L	--	--	--	1.16		0.01	0.01	3.44		0.01	0.01	1.35		0.01	0.01	0.52		0.01	0.01
Oxidation Reduction Potential	millivolts	--	--	--	35.2		0.1	0.1	51.2		0.1	0.1	548.0		0.1	0.1	-7.9		0.1	0.1
Temperature	C	--	--	--	17.1		0.1	0.1	22.3		0.1	0.1	17.6		0.1	0.1	16.5		0.1	0.1
Turbidity	NTU	--	--	--	2.32		0.01	0.01	0.88		0.01	0.01	0.94		0.01	0.01	7.91		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
J+ = The result is an estimated quantity; the results may be biased high
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 3
Summary of North Pond Groundwater Second Semi-Annual Sampling Event (August 2024)
Bremo Power Station, North Pond
Permit No 618

					Sentinel Wells													
				Sample ID:	MW-25S				MW-25D				MW-26S				MW-26D			
				Sample Date:	8/27/2024				8/26/2024				8/26/2024				8/26/2024			
Parameter Name	**Units**	**Site Specific Background[1]**	**Federal GWPS[1]**	**SWP GPS[1]**	**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	**15.0**	J	4.0	50.0	**20.6**	J	4.0	50.0	< 4.0	U	4.0	50.0	**6.0**	J	4.0	50.0
Calcium	µg/L	48,900	--	--	**39400**		14.7	100	**25200**		14.7	100	**8110**		14.7	100	**40000**		14.7	100
Chloride	mg/L	102.2	--	--	**8.4**		0.60	1.0	**9.6**		0.60	1.0	**2.6**		0.60	1.0	**10.2**		0.60	1.0
Fluoride	mg/L	0.16	4	4	**0.072**	J	0.050	0.10	< 0.050	U	0.050	0.10	< 0.050	U	0.050	0.10	< 0.050	U	0.050	0.10
pH	SU	4.94-8.84	--	--	6.58		0.01	0.01	5.82		0.01	0.01	5.63		0.01	0.01	6.28		0.01	0.01
Sulfate	mg/L	237.8	--	--	**15.6**		0.50	1.0	**18.6**		0.50	1.0	**2.1**		0.50	1.0	**51.0**		0.50	1.0
Total Dissolved Solids	mg/L	580	--	--	**222**		25.0	25.0	**173**		25.0	25.0	**104**		25.0	25.0	**273**		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
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
Barium	µg/L	40.4	2,000	2,000	**11.6**		0.79	5.0	**21.2**		0.79	5.0	**18.3**		0.79	5.0	**162**		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
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
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	< 0.63	U	0.63	5.0
Cobalt	µg/L	1.57	6	6	**1.9**		0.14	1.0	**0.78**	J	0.14	1.0	< 0.14	U	0.14	1.0	**0.58**	J	0.14	1.0
Fluoride	mg/L	0.16	4	4	**0.072**	J	0.050	0.10	< 0.050	U	0.050	0.10	< 0.050	U	0.050	0.10	< 0.050	U	0.050	0.10
Lead	µg/L	QL	15*	15	< 0.18	U	0.18	1.0	**0.52**	J	0.18	1.0	< 0.18	U	0.18	1.0	< 0.18	U	0.18	1.0
Lithium	µg/L	QL	40	40	**0.90**	J	0.33	2.5	**2.9**		0.33	2.5	**0.83**	J	0.33	2.5	**5.4**		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
Molybdenum	µg/L	9.3	100	100	< 2.6	U	2.6	5.0	**11.1**		2.6	5.0	< 2.6	U	2.6	5.0	**3.1**	J	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
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
Radium 226 and 228 (Combined)	pCi/L	4.254	5	5	**0.937**	J+	--	--	**1.28**	J+	--	--	**0.312**	J	--	--	**0.313**	J	--	--
VSWMR Constituents																				
Copper	µg/L	QL	--	1,300*	**1.2**	J	0.62	5.0	**1.7**	J	0.62	5.0	< 0.62	U	0.62	5.0	< 0.62	U	0.62	5.0
Nickel	µg/L	QL	--	QL	**0.94**	J	0.88	5.0	**2.9**	J	0.88	5.0	< 0.88	U	0.88	5.0	**1.2**	J	0.88	5.0
Silver	µg/L	QL	--	QL	**2.2**	J	0.49	5.0	< 0.49	U	0.49	5.0	< 0.49	U	0.49	5.0	**0.92**	J	0.49	5.0
Tin	µg/L	QL	--	QL	**0.16**	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	< 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	**4.4**	J	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	--	--	< 0.083	U	0.083	0.083	< 0.0080	U	0.0080	0.025	**0.27**	J+	0.0043	0.025	**0.14**	J+	0.0043	0.025
Former VPDES Constituents																				
Ammonia	mg/L	--	--	--	< 0.031	U	0.031	0.10	< 0.031	U	0.031	0.10	< 0.031	U	0.031	0.10	**0.035**	J	0.031	0.10
Hardness	µg/L	--	--	--	**138000**		36.8	662	**79200**		36.8	662	**26000**		36.8	662	**133000**		36.8	662
Iron	µg/L	--	--	--	**331**		3.0	20.0	**736**		3.0	20.0	< 18.4	U	18.4	20.0	**2280**		3.0	20.0
Manganese	µg/L	--	--	--	**83.5**		0.24	2.0	**125**		0.24	2.0	**3.1**		0.24	2.0	**1030**		2.4	20.0
Nitrate	mg/L	--	--	--	< 0.060	U	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	--	--	--	348.6		0.1	0.1	226.1		0.1	0.1	142.7		0.1	0.1	397.9		0.1	0.1
Dissolved Oxygen	mg/L	--	--	--	1.48		0.01	0.01	1.74		0.01	0.01	9.24		0.01	0.01	1.69		0.01	0.01
Oxidation Reduction Potential	millivolts	--	--	--	32.8		0.1	0.1	75.4		0.1	0.1	213.3		0.1	0.1	-18.7		0.1	0.1
Temperature	C	--	--	--	16.4		0.1	0.1	15.6		0.1	0.1	16.6		0.1	0.1	18.0		0.1	0.1
Turbidity	NTU	--	--	--	1.77		0.01	0.01	7.56		0.01	0.01	1.01		0.01	0.01	3.31		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
J+ = The result is an estimated quantity; the results may be biased high
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 3
Summary of North Pond Groundwater Second Semi-Annual Sampling Event (August 2024)
Bremo Power Station, North Pond
Permit No 618

					Sentinel Wells								Field Quality Control Samples							
					MW-27S				MW-28				MW-24 Field Duplicate				Field Blank			
Sample ID:																				
Sample Date:					8/27/2024				8/26/2024				8/27/2024				8/26/2024			
Parameter Name	**Units**	**Site Specific Background[1]**	**Federal GWPS[1]**	**SWP GPS[1]**	**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	**1410**		4.0	50.0	**246**		4.0	50.0	**229**		4.0	50.0	< 4.0	U	4.0	50.0
Calcium	µg/L	48,900	--	--	**117000**		147	1000	**58200**		14.7	100	**69700**		14.7	100	< 14.7	U	14.7	100
Chloride	mg/L	102.2	--	--	**10.8**		0.60	1.0	**9.6**		0.60	1.0	**18.4**		0.60	1.0	< 0.60	U	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	< 0.050	U	0.050	0.10	< 0.050	U	0.050	0.10
pH	SU	4.94-8.84	--	--	6.34		0.01	0.01	5.90		0.01	0.01	--		--	--	--		--	--
Sulfate	mg/L	237.8	--	--	**155**		1.5	3.0	**93.6**		1.0	2.0	**39.2**		0.50	1.0	< 2.0	U	0.50	1.0
Total Dissolved Solids	mg/L	580	--	--	**663**		25.0	25.0	**375**		25.0	25.0	**347**		25.0	25.0	< 25.0	U	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
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
Barium	µg/L	40.4	2,000	2,000	**77.3**		0.79	5.0	**46.3**		0.79	5.0	**74.0**		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
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
Chromium	µg/L	QL	100	100	< 0.63	U	0.63	5.0	**1.2**	J	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	**0.15**	J	0.14	1.0	< 0.14	U	0.14	1.0	**50.0**		0.14	1.0	< 0.14	U	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	< 0.050	U	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
Lithium	µg/L	QL	40	40	**4.6**		0.33	2.5	**1.5**	J	0.33	2.5	**2.7**		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
Molybdenum	µg/L	9.3	100	100	< 2.6	U	2.6	5.0	< 2.6	U	2.6	5.0	**7.6**		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
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
Radium 226 and 228 (Combined)	pCi/L	4.254	5	5	**1.75**	J+	--	--	**1.10**	J+	--	--	**2.17**	J	--	--	0.285	U	--	--
VSWMR Constituents																				
Copper	µg/L	QL	--	1,300*	**0.83**	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	**1.6**	J	0.88	5.0	**12.1**		0.88	5.0	< 0.88	U	0.88	5.0	< 0.88	U	0.88	5.0
Silver	µg/L	QL	--	QL	**2.5**	J	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
Vanadium	µg/L	19.1	--	19.1	**4.2**	J	1.6	5.0	**2.0**	J	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	< 3.0	U	3.0	10.0	< 3.0	U	3.0	10.0
Speciation of Chromium																				
Hexavalent Chromium	µg/L	13	--	--	**0.93**	J	0.022	0.12	**0.25**	J	0.022	0.12	< 0.0043	UJ	0.0043	0.025	**0.025**		0.0043	0.025
Former VPDES Constituents																				
Ammonia	mg/L	--	--	--	< 0.031	U	0.031	0.10	< 0.031	U	0.031	0.10	**0.47**		0.031	0.10	< 0.0-31	U	0.031	0.10
Hardness	µg/L	--	--	--	**505000**		368	6620	**230000**		36.8	662	**223000**		36.8	662	< 36.8	U	36.8	662
Iron	µg/L	--	--	--	**27.9**		3.0	20.0	**218**		3.0	20.0	**6170**		3.0	20.0	< 3.0	U	3.0	20.0
Manganese	µg/L	--	--	--	**31.5**		0.24	2.0	**12.7**		0.24	2.0	**3230**		7.1	60.0	< 0.24	U	0.24	2.0
Nitrate	mg/L	--	--	--	< 0.060	U	0.060	0.10	**0.26**	J	0.060	0.10	< 0.060	U	0.060	0.10	< 0.060	UJ	0.060	0.10
Field Parameters																				
Conductivity	µS/cm	--	--	--	971		0.1	0.1	550		0.1	0.1	--		--	--	--		--	--
Dissolved Oxygen	mg/L	--	--	--	0.84		0.01	0.01	1.55		0.01	0.01	--		--	--	--		--	--
Oxidation Reduction Potential	millivolts	--	--	--	108.7		0.1	0.1	154.7		0.1	0.1	--		--	--	--		--	--
Temperature	C	--	--	--	16.7		0.1	0.1	15.1		0.1	0.1	--		--	--	--		--	--
Turbidity	NTU	--	--	--	1.79		0.01	0.01	4.05		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
J+ = The result is an estimated quantity; the results may be biased high
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 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 in *Appendix E*	X		
Included historical summary of laboratory results in *Appendix F*	X		
Full list of References as Section 9.0	X		
Copy of this QA/QC checklist as *Appendix A*	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, North Pond
Solid Waste 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	10/27/2016	26.54	303.98
		12/07/2016	27.30	303.22
		01/18/2017	27.65	302.87
		02/28/2017	27.78	302.74
		04/10/2017	27.73	302.79
		05/11/2017	27.36	303.16
		06/19/2017	27.20	303.32
		07/25/2017	28.01	302.51
		09/06/2017	29.04	301.48
		01/29/2018	30.77	299.75
		04/30/2018	30.01	300.51
		10/15/2018	28.06	302.46
		01/16/2019	24.84	305.68
		09/09/2019	24.98	305.54
		11/18/2019	26.75	303.77
		03/02/2020	27.32	303.20
		06/02/2020	26.42	304.10
		08/24/2020	28.21	302.31
		10/30/2020	28.58	301.94
		12/01/2020	27.34	303.18
		02/23/2021	23.79	306.73
		06/07/2021	23.14	307.38
		08/30/2021	25.79	304.73
		02/07/2022	28.68	301.84
		08/29/2022	29.03	301.49
		02/13/2023	30.19	300.33
		08/21/2023	30.12	300.40
		02/12/2024	30.00	300.52
		08/26/2024	28.67	301.85
MW-29D	390.43	10/31/2017	145.32	245.11
		12/07/2016	56.35	334.08
		01/18/2017	41.60	348.83
		02/28/2017	42.38	348.05
		04/10/2017	42.60	347.83
		05/11/2017	43.54	346.89
		06/19/2017	42.93	347.50
		07/25/2017	43.56	346.87
		09/06/2017	43.79	346.64
		01/29/2018	44.85	345.58
		05/01/2018	45.90	344.53
		10/15/2018	44.32	346.11
		01/16/2019	51.07	339.36
		09/09/2019	40.29	350.14
		11/18/2019	41.65	348.78
		03/02/2020	42.27	348.16
		06/02/2020	42.42	348.01
		08/24/2020	43.00	347.43
		12/01/2020	43.02	347.41
		02/23/2021	42.81	347.62
		06/07/2021	40.10	350.33
		08/30/2021	40.05	350.38
		02/07/2022	42.67	347.76
		08/29/2022	43.78	346.65
		02/13/2023	44.42	346.01
		08/21/2023	44.72	345.71
		02/12/2024	45.33	345.10
		08/26/2024	44.21	346.22

Appendix B
Summary of Historical CCR and VSWMR Static Water Level Data
Bremo Power Station, North Pond
Solid Waste 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-29S	387.32	10/27/2016	38.81	348.51
Formerly		12/07/2016	39.31	348.01
OW-29S		01/18/2017	39.70	347.62
		02/28/2017	40.07	347.25
		04/10/2017	40.38	346.94
		05/11/2017	40.31	347.01
		06/19/2017	40.53	346.79
		07/25/2017	40.84	346.48
		09/06/2017	41.42	345.90
		01/29/2018	43.38	343.94
		05/01/2018	44.00	343.32
		10/15/2018	42.21	345.11
		01/16/2019	40.62	346.70
		09/09/2019	37.29	350.03
		11/18/2019	38.85	348.47
		03/02/2020	40.20	347.12
		06/02/2020	40.31	347.01
		08/24/2020	40.82	346.50
		12/01/2020	41.16	346.16
		02/23/2021	39.07	348.25
		06/07/2021	37.13	350.19
		08/30/2021	38.14	349.18
		02/07/2022	40.85	346.47
		08/29/2022	41.97	345.35
		02/13/2023	43.12	344.20
		08/21/2023	43.40	343.92
		02/12/2024	44.14	343.18
		08/26/2024	42.67	344.65
MW-24	346.04	10/28/2016	52.28	293.76
		12/07/2016	53.72	292.32
		01/18/2017	53.75	292.29
		02/28/2017	55.59	290.45
		04/10/2017	58.25	287.79
		05/11/2017	59.55	286.49
		06/20/2017	61.15	284.89
		07/25/2017	64.32	281.72
		09/06/2017	65.73	280.31
		01/29/2018	69.36	276.68
		04/30/2018	70.89	275.15
		10/15/2018	74.45	271.59
		01/16/2019	72.68	273.36
		09/09/2019	75.51	270.53
		11/18/2019	76.59	269.45
		03/04/2020	79.13	266.91
		04/08/2020	78.54	267.50
		06/02/2020	78.60	267.44
		08/24/2020	79.52	266.52
		09/30/2020	80.90	265.14
		12/01/2020	79.48	266.56
		02/23/2021	77.85	268.19
		06/07/2021	78.64	267.40
		08/30/2021	80.25	265.79
		02/07/2022	82.88	263.16
		09/06/2022	81.89	264.15
		02/13/2023	83.49	262.55
		08/21/2023	85.06	260.98
		02/12/2024	84.69	261.35
		08/26/2024	84.48	261.56

Appendix B
Summary of Historical CCR and VSWMR Static Water Level Data
Bremo Power Station, North Pond
Solid Waste 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-25D	361.41	10/27/2016	Not Measured	Not Measured
Formerly		12/07/2016	42.30	319.11
OW-25D		01/18/2017	42.12	319.29
		03/01/2017	42.88	318.53
		04/10/2017	42.22	319.19
		05/11/2017	41.91	319.50
		06/20/2017	42.16	319.25
		07/25/2017	43.33	318.08
		09/06/2017	43.02	318.39
		01/29/2018	41.57	319.84
		04/30/2018	Not Measured	Not Measured
		10/15/2018	41.30	320.11
		01/16/2019	40.86	320.55
		09/09/2019	42.22	319.19
		10/10/2019	42.84	318.57
		11/18/2019	43.03	318.38
		03/02/2020	43.76	317.65
		06/02/2020	44.32	317.09
		08/24/2020	44.90	316.51
		12/01/2020	44.56	316.85
		02/23/2021	43.55	317.86
		04/16/2021	43.70	317.71
		06/07/2021	44.43	316.98
		08/30/2021	45.24	316.17
		02/07/2022	46.51	314.90
		09/06/2022	47.56	313.85
		02/13/2023	47.98	313.43
		08/21/2023	48.91	312.50
		02/12/2024	48.95	312.46
		08/26/2024	49.33	312.08
MW-25S	361.36	10/27/2016	Not Measured	Not Measured
		12/07/2016	41.91	319.45
		01/18/2017	41.97	319.39
		03/01/2017	42.69	318.67
		04/10/2017	42.61	318.75
		05/11/2017	42.28	319.08
		06/20/2017	42.53	318.83
		07/25/2017	43.59	317.77
		09/06/2017	43.64	317.72
		01/29/2018	42.04	319.32
		04/30/2018	Not Measured	Not Measured
		10/15/2018	42.25	319.11
		01/16/2019	40.30	321.06
		09/09/2019	41.60	319.76
		11/18/2019	42.64	318.72
		03/02/2020	43.61	317.75
		06/02/2020	44.01	317.35
		08/24/2020	44.82	316.54
		12/01/2020	43.95	317.41
		02/23/2021	42.72	318.64
		06/07/2021	43.32	318.04
		08/30/2021	44.49	316.87
		02/07/2022	46.32	315.04
		09/06/2022	47.24	314.12
		02/13/2023	47.76	313.60
		08/21/2023	48.52	312.84
		02/12/2024	48.37	312.99
		08/26/2024	48.30	313.06

Appendix B
Summary of Historical CCR and VSWMR Static Water Level Data
Bremo Power Station, North Pond
Solid Waste 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-26D	394.28	10/27/2016	49.94	344.34
Formerly		12/07/2016	49.78	344.50
OW-26D		01/18/2017	49.7	344.58
		02/28/2017	49.79	344.49
		04/10/2017	50.13	344.15
		05/11/2017	50.19	344.09
		06/19/2017	50.48	343.80
		07/25/2017	50.75	343.53
		09/06/2017	50.93	343.35
		01/29/2018	51.89	342.39
		04/30/2018	Not Measured	Not Measured
		10/15/2018	53.15	341.13
		01/16/2019	52.89	341.39
		09/09/2019	50.81	343.47
		11/18/2019	51.05	343.23
		03/02/2020	52.00	342.28
		06/02/2020	52.82	341.46
		08/24/2020	53.41	340.87
		12/01/2020	54.05	340.23
		02/23/2021	54.16	340.12
		06/07/2021	54.13	340.15
		08/30/2021	54.20	340.08
		02/07/2022	54.98	339.30
		09/06/2022	56.84	337.44
		02/13/2023	58.01	336.27
		08/21/2023	59.55	334.73
		02/12/2024	60.6	333.68
		08/26/2024	61.78	332.50
MW-26S	394.82	10/27/2016	50.30	344.52
		12/07/2016	50.11	344.71
		01/18/2017	50.03	344.79
		02/28/2017	50.15	344.67
		04/10/2017	50.47	344.35
		05/11/2017	50.51	344.31
		06/19/2017	50.85	343.97
		07/25/2017	50.99	343.83
		09/06/2017	51.56	343.26
		01/29/2018	52.25	342.57
		04/30/2018	Not Measured	Not Measured
		10/15/2018	53.56	341.26
		01/16/2019	53.20	341.62
		09/09/2019	51.16	343.66
		11/18/2019	51.37	343.45
		03/02/2020	50.30	344.52
		06/02/2020	53.19	341.63
		08/24/2020	53.80	341.02
		12/01/2020	54.42	340.40
		02/23/2021	54.46	340.36
		06/07/2021	54.40	340.42
		08/30/2021	54.50	340.32
		02/07/2022	55.37	339.45
		09/06/2022	57.12	337.70
		02/13/2023	58.28	336.54
		08/21/2023	59.70	335.12
		02/12/2024	60.88	333.94
		08/26/2024	62.04	332.78

Appendix B
Summary of Historical CCR and VSWMR Static Water Level Data
Bremo Power Station, North Pond
Solid Waste 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-27D	329.22	11/01/2016	145.69	183.53
		12/07/2016	186.96	142.26
		01/18/2017	161.82	167.40
		03/01/2017	148.41	180.81
		04/10/2017	141.55	187.67
		05/11/2017	129.28	199.94
		06/19/2017	79.81	249.41
		07/25/2017	38.71	290.51
		09/06/2017	32.68	296.54
		01/29/2018	35.25	293.97
		04/30/2018	36.13	293.09
		10/15/2018	35.76	293.46
		01/16/2019	33.90	295.32
		09/09/2019	36.00	293.22
		11/18/2019	37.49	291.73
		03/02/2020	38.69	290.53
		06/02/2020	39.30	289.92
		08/24/2020	39.86	289.36
		12/01/2020	40.29	288.93
		02/23/2021	42.84	286.38
		06/07/2021	38.05	291.17
		08/30/2021	39.34	289.88
		02/07/2022	41.02	288.20
		09/06/2022	43.69	285.53
		02/13/2023	42.46	286.76
		08/21/2023	42.85	286.37
		02/12/2024	43.31	285.91
		08/26/2024	42.12	287.10
MW-27S	330.88	10/27/2016	67.22	263.66
		12/07/2016	24.61	306.27
		01/18/2017	25.92	304.96
		03/01/2017	26.57	304.31
		04/10/2017	27.38	303.50
		05/11/2017	28.22	302.66
		06/19/2017	29.66	301.22
		07/25/2017	31.08	299.80
		09/06/2017	32.91	297.97
		01/29/2018	36.95	293.93
		04/30/2018	Not Measured	Not Measured
		10/15/2018	37.06	293.82
		01/16/2018	35.18	295.70
		09/09/2019	37.65	293.23
		11/18/2019	38.84	292.04
		03/02/2020	40.13	290.75
		06/02/2020	40.68	290.20
		08/24/2020	41.23	289.65
		12/01/2020	41.62	289.26
		02/23/2021	40.22	290.66
		06/07/2021	39.45	291.43
		08/30/2021	40.84	290.04
		02/07/2022	42.44	288.44
		09/06/2022	43.05	287.83
		02/13/2023	43.85	287.03
		08/21/2023	44.18	286.70
		02/12/2024	44.63	286.25
		08/26/2024	43.65	287.23

Appendix B
Summary of Historical CCR and VSWMR Static Water Level Data
Bremo Power Station, North Pond
Solid Waste 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-28	329.87	10/27/2016	29.13	300.74
		12/07/2016	29.72	300.15
		01/18/2017	30.29	299.58
		03/01/2017	30.66	299.21
		04/10/2017	31.04	298.83
		05/11/2017	31.28	298.59
		06/19/2017	31.99	297.88
		07/25/2017	33.09	296.78
		09/06/2017	BTOP	BTOP
		01/29/2018	37.15	292.72
		04/30/2018	Not Measured	Not Measured
		10/15/2018	36.85	293.02
		01/16/2019	34.59	295.28
		09/09/2019	37.26	292.61
		11/18/2019	38.34	291.53
		03/02/2020	38.36	291.51
		06/02/2020	38.26	291.61
		08/24/2020	39.51	290.36
		09/30/2020	39.86	290.01
		12/01/2020	38.33	291.54
		02/23/2021	36.47	293.40
		06/07/2021	36.44	293.43
		08/30/2021	38.52	291.35
		02/07/2022	39.80	290.07
		09/06/2022	40.61	289.26
		02/13/2023	40.70	289.17
		08/21/2023	41.66	288.21
		02/12/2024	41.15	288.72
		08/26/2024	41.48	288.39
MW-33	336.50	10/27/2016	105.29	231.21
		12/07/2016	80.40	256.10
		01/18/2017	80.98	255.52
		03/01/2017	81.50	255.00
		04/10/2017	82.52	253.98
		05/11/2017	83.81	252.69
		06/20/2017	85.42	251.08
		07/25/2017	87.08	249.42
		09/06/2017	88.22	248.28
		01/29/2018	92.34	244.16
		04/30/2018	92.56	243.94
		10/15/2018	90.75	245.75
		01/16/2019	90.39	246.11
		09/09/2019	89.41	247.09
		10/10/2019	89.33	247.17
		11/18/2019	89.10	247.40
		03/02/2020	90.00	246.50
		06/02/2020	91.46	245.04
		08/24/2020	92.60	243.90
		12/01/2020	91.30	245.20
		02/23/2021	90.73	245.77
		06/07/2021	92.87	243.63
		08/30/2021	93.47	243.03
		11/29/2021	93.94	242.56
		02/07/2022	93.79	242.71
		09/06/2022	95.02	241.48
		02/13/2023	94.42	242.08
		08/21/2023	95.92	240.58
		02/12/2024	94.44	242.06
		08/26/2024	95.08	241.42

Appendix B
Summary of Historical CCR and VSWMR Static Water Level Data
Bremo Power Station, North Pond
Solid Waste 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-34	338.18	10/31/2016	80.77	257.41
		12/07/2016	81.15	257.03
		01/18/2017	80.96	257.22
		02/28/2017	81.61	256.57
		04/10/2017	83.63	254.55
		05/11/2017	85.29	252.89
		06/20/2017	87.27	250.91
		07/25/2017	88.85	249.33
		09/06/2017	90.22	247.96
		01/29/2018	92.31	245.87
		04/30/2018	102.14	236.04
		10/15/2018	103.79	234.39
		01/16/2019	103.85	234.33
		09/09/2019	99.83	238.35
		11/18/2019	93.88	244.30
		03/02/2020	93.45	244.73
		06/02/2020	93.95	244.23
		08/24/2020	94.25	243.93
		12/01/2020	93.34	244.84
		02/23/2021	93.30	244.88
		06/07/2021	94.31	243.87
		08/30/2021	94.61	243.57
		02/07/2022	97.78	240.40
		09/07/2022	95.05	243.13
		02/13/2023	94.53	243.65
		08/21/2023	95.34	242.84
		02/12/2024	94.51	243.67
		08/26/2024	94.90	243.28
MW-35	335.65	10/27/2016	98.86	236.79
		12/07/2016	98.85	236.80
		01/18/2017	98.68	236.97
		02/28/2017	99.01	236.64
		04/10/2017	99.32	236.33
		05/11/2017	101.19	234.46
		06/20/2017	102.12	233.53
		07/25/2017	104.3	231.35
		09/06/2017	106.1	229.55
		01/29/2018	106.79	228.86
		04/30/2018	107.33	228.32
		10/15/2018	108.97	226.68
		01/16/2019	108.95	226.70
		09/09/2019	105.54	230.11
		11/18/2019	105.43	230.22
		03/02/2020	105.25	230.40
		06/02/2020	105.31	230.34
		08/24/2020	91.24	244.41
		12/01/2020	103.87	231.78
		02/23/2021	103.41	232.24
		06/07/2021	105.52	230.13
		08/30/2021	106.00	229.65
		11/29/2021	106.03	229.62
		02/07/2022	105.32	230.33
		09/07/2022	105.87	229.78
		02/13/2023	104.47	231.18
		08/21/2023	106.29	229.36
		02/12/2024	104.99	230.66
		08/26/2024	106.15	229.50

Notes: CCR = Coal Combustion Residuals
VSWMR = Virginia Solid Waste Management Regulations
AMSL = Above Mean Sea Level

APPENDIX C
GROUNDWATER FLOW RATE CALCULATIONS

Appendix C.1

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

First Semi-Annual Groundwater Monitoring Event (February 2024)

The average hydraulic gradient 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:
Vgw = Groundwater Velocity (ft/s)
k = hydraulic conductivity (ft/s)
i = hydraulic gradient (unitless)
Θ = assumed porosity (unitless)

Groundwater Flow	Aquifer Formation	Hydraulic Conductivity (k, ft/s)	Starting Head (ft amsl)	Ending Head (ft amsl)	Flow Length (ft)	Gradient (i)	Assumed Porosity (Θ)	Approximate Average Groundwater Velocity	
								(ft/s)	(ft/yr)
Vgw₁	Saprolite	3.24E-06	343.18	243.67	2,687	3.70E-02	0.20	6.0E-07	19
	Gneiss Bedrock	1.53E-05	343.18	243.67	2,687	3.70E-02	0.025	2.3E-05	725

Notes: ft/s = feet per second
ft/yr = feet per year
amsl = above mean sea level
k = hydraulic conductivity; values updated in 2021
Θ = estimated value based on properties of the lithologies comprising the uppermost aquifer

Appendix C.2

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

Second Semi-Annual Groundwater Monitoring Event (August 2024)

The average hydraulic gradient 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:
Vgw = Groundwater Velocity (ft/s)
k = hydraulic conductivity (ft/s)
i = hydraulic gradient (unitless)
θ = assumed porosity (unitless)

Groundwater Flow	Aquifer Formation	Hydraulic Conductivity (k, ft/s)	Starting Head (ft amsl)	Ending Head (ft amsl)	Flow Length (ft)	Gradient (i)	Assumed Porosity (Θ)	Approximate Average Groundwater Velocity	
								(ft/s)	(ft/yr)
Vgw_1	Saprolite	3.24E-06	344.65	243.28	2,687	3.77E-02	0.20	6.1E-07	19
	Gneiss Bedrock	1.53E-05	344.65	243.28	2,687	3.77E-02	0.025	2.3E-05	725

Notes: ft/s = feet per second
ft/yr = feet per year
amsl = above mean sea level
k = hydraulic conductivity; values updated in 2021
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: 02/14/2024
Weather: cloudy 40's

Project Name: Bremo Power Station
Project No./Task No.: 31406066.009
Event: 1SA24 GW
Sampler(s): J. DAVIS
Well ID: MW-24
Field Calibration Completed: 02/14/2024 @ 0815
Well Diameter: 2.0 inches
Initial Depth to Water: 84.59 feet
Depth to Bottom: - feet
Water Column Thickness: - feet

Equipment Used:
- [x] WL Indicator
- [x] YSI Pro DSS 23J100253
- [ ] 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
1130	6.12	799	52.62	0.57	14.4	-20.3	91.20	~300
1135	6.15	786	118.30	0.51	14.4	-24.0	92.08	~300
1140	6.20	740	144.77	0.46	14.4	-27.9	92.83	~300
1145	6.23	711	5.60	2.25	13.8	-29.8	92.81	~150
1150	6.21	705	4.99	0.75	14.0	-26.2	92.80	~150
1155	6.25	682	6.21	0.55	14.1	-27.2	92.78	~150
1200	6.27	670	5.58	0.53	14.1	-28.2	92.79	~150
1205	6.29	650	6.81	0.49	14.1	-28.7	92.80	~150
1210	6.32	619	7.79	0.47	14.1	-28.8	92.73	~150
1215	6.34	593	8.65	0.45	14.2	-28.6	92.62	~150
1220	6.34	581	9.04	0.45	14.1	-27.1	92.54	~150
1225	6.35	566	8.23	0.42	14.2	-26.0	92.43	~150
1230	6.36	562	9.44	0.53	14.1	-24.5	92.16	~150
1235	6.37	557	9.21	0.46	14.2	-24.2	91.94	~150
1240	-	S	A	M	P	C	E	-
1300	6.43	532	9.17	0.68	14.2	-2.5	92.23	~150

Purge Cycle (End): 50/10 @ ~80 psi
Flow Rate (ml/min End): ~150 mL/min
Purge volume (gallons) prior to stabilization monitoring (3/8" I.D. Tube: Vol=Depth to Pump x 0.006 gal/ft): 149.03 x .006 = 7.897
Total Purge Volume (Gallons): ~6.0
Purge Water Management: on site containment
Purge Observations (color, odor, turbidity, sheen): clear grab sample
Purge time: 1118 @ 13/7 → 50/10 1226 charge air tank
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: DTP = 149.63
Sample ID: 021424NMW24

Sampler Signature: Jason Davis Date: 02/14/2024
QA/QC Signature: M.Kuf Date: 2/14/24

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-27D
Field Calibration Completed: 2/14/24@ 0815
Well Diameter: 2.0 inches
Initial Depth to Water: 44.24 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)^{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
1316	6.34	1075	7.8	0.96	15.0	14.1	51.19	~400
1319	6.24	1061	4.7	0.92	15.0	34.9	53.24	~400
1322	6.19	1050	3.7	0.80	15.0	47.7	54.61	~400
1325	6.15	1038	3.1	0.85	15.1	61.3	54.98	~400
1328	6.14	1034	2.6	0.91	15.0	68.7	57.68	~350
1331	—	—	change air tank	—	—	—	—	—
1333	6.13	1034	2.5	0.81	15.3	69.2	58.55	~350
1340	—	—	—	SAMPLE	—	—	—	—
1350	6.17	1034	4.0	0.70	15.1	82.7	61.32	~350

Purge Cycle (End): 19/11 secs @ ~100 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): 1.19
Total Purge Volume (Gallons): ~3.5
Purge Water Management: on-site containment
Purge Observations (color, odor, turbidity, sheen): clear grab sample
Purge time: 1308
Sample Time: 1340
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: 198.32
Sample ID: 021424NMW27D

Sampler Signature: M. Knez Date: 2/14/24
QA/QC Signature: [signature] Date: 02/15/2024

MICROPURGE SAMPLING LOG

Date: 02/14/24
Weather: cloudy, 40s

Project Name: Bremo Power Station
Project No./Task No.: 31406066.009
Event: 1SA24 GW
Sampler(s): Z. Mondshine
Well ID: MW-33
Field Calibration Completed: 0815 on 2/14/23
Well Diameter: 2.0 inches
Initial Depth to Water: 94.25 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
1130	6.42	638	3.84	3.56	14.6	35.5	98.26	~150
1135	6.48	623	3.28	3.41	14.5	39.7	99.65	~150
1140	6.55	605	3.22	3.34	14.5	43.8	100.98	~150
1145	—	change air tank	—	—	—	—	—	~~150~~ 2/14
1150	6.61	582	3.06	4.23	14.5	55.9	102.73	~150
1155	6.62	575	3.04	4.69	14.9	61.8	104.04	~150
1200	6.64	572	3.19	4.77	15.2	62.1	105.61	~150
1205	—	—	SAMPLE	—	—	—	—	—
1230	6.74	565	2.83	5.57	15.4	62.5	110.85	~150

Purge Cycle (End): 18/12 @ ~85 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): 0.78
Total Purge Volume (Gallons): ~3.0
Purge Water Management: on site containment
Purge Observations (color, odor, turbidity, sheen): clear grab sample
Purge time: 1116
Sample Time: 1205
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: 129.58
Sample ID: 021424NMW33

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

MICROPURGE SAMPLING LOG

Date: 02/13/24
Weather: windy, 40s

Project Name: Bremo Power Station
Project No./Task No.: 31406066.009
Event: 1SA24 GW
Sampler(s): Z. Monahine
Well ID: MW-34
Field Calibration Completed: 0815 on 2/13/24
Well Diameter: 2.0 inches
Initial Depth to Water: 94.52 feet
Depth to Bottom: — feet
Water Column Thickness: — feet

Equipment Used:
- [x] WL Indicator
- [ ] Turbidity Meter
- [ ] Air Tank
- [x] Dedicated Bladder Pump
- [x] YSI ProDSS16C103994
- [ ] 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
1455 ~~1555 2/13/24~~	6.09	376.7	2.61	2.27	15.3	306.7	94.73	~250
1500	—	— change air tank —						
1505	6.11	377.9	2.04	2.08	15.1	439.8	94.86	~250
1510	6.10	378.1	1.36	1.64	14.9	476.9	94.89	~250
1515	6.10	378.3	1.57	1.61	14.9	494.7	94.92	~250
1520	6.10	378.8	1.33	1.46	14.9	515.9	94.95	~250
1525	6.11	378.8	1.25	1.46	14.9	519.9	94.96	~250
1530	6.11	378.6	1.14	1.47	15.0	523.2	94.98	~250
1540	—	—	— SAMPLE —					
1615	6.11	377.3	1.06	1.23	14.6	546.8	95.07	~250

Purge Cycle (End): 24/6 @ ~60 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): 0.79
Total Purge Volume (Gallons): ~3.75
Purge Water Management: on site containment
Purge Observations (color, odor, turbidity, sheen): Clear grab sample,
Purge time: 1447
Sample Time: 1540
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: 131.24 MS/MSD taken here
Sample ID: 021324NMW34 ; 021324NNPMS; 021324NNPMSD

Sampler Signature: [signature] Date: 02/13/24
QA/QC Signature: [signature] Date: 2/15/24

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-35
Field Calibration Completed: 2/14/24 @ 0815
Well Diameter: 2.0 inches
Initial Depth to Water: 104.58 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
1130	5.92	473.8	46.4	0.93	14.4	53.8	104.85	~350
1135	6.00	476.2	11.7	0.91	14.2	46.9	104.82	~400
1140	6.02	474.5	16.0	0.96	14.2	44.7	104.91	~400
1145	6.07	471.4	26.4	0.90	14.3	41.2	104.93	~400
1150	6.09	469.0	30.7	0.97	14.3	40.0	104.95	~400
1155	6.12	468.3	29.7	0.80	14.2	38.5	104.96	~400
1200	6.14	465.4	79.6	0.69	14.3	37.0	105.00	~450
1205	6.16	467.9	9.7	0.53	14.4	36.4	105.01	~450
* 1210	—	—	—	SAMPLE	—	—	—	—
1245	6.20	453.7	7.8	0.67	14.4	41.0	105.10	~450

Purge Cycle (End): 22/8 @ ~80 psi
Flow Rate (ml/min End): ~450
Purge volume (gallons) prior to stabilization monitoring (3/8" I.D. Tube: Vol=Depth to Pump x 0.006 gal/ft): 0.76
Total Purge Volume (Gallons): ~7.5
Purge Water Management: on site containment
Purge Observations (color, odor, turbidity, sheen): clear grab sample
Purge time: 1121 FD taken here
Sample Time: 1210
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: 127.28 *: air tank changed
Sample ID: 021424NMW35

Sampler Signature: M. Knez Date: 2/14/24
QA/QC Signature: Jessica 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: NP 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
- [ ] 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
1220	—	—	—	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-35
Purge time: —

Sample Time: 1220 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:
Sample ID: 021424NNPFDDuplicate

Sampler Signature: M. Knez Date: 2/14/24 Page 1 of 1
QA/QC Signature: [signature] Date: 02/15/2024

MICROPURGE SAMPLING LOG

Date: 2/13/24
Weather: windy, 40s

Project Name: Bremo Power Station
Project No./Task No.: 31406066.009
Event: 1SA24 GW
Sampler(s): Z Mondshine
Well ID: MW-25S
Field Calibration Completed: 0815 on 2/13/24
Well Diameter: 2.0 inches
Initial Depth to Water: 48.30 feet
Depth to Bottom: — feet
Water Column Thickness: — feet

Equipment Used:
- [x] WL Indicator
- [x] YSI ProDSS16C103994
- [ ] 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
1305	6.52	360.4	9.49	2.52	13.8	37.2	54.94	~300
1308	6.53	360.0	13.04	2.56	13.8	40.9	56.21	~300
1311	6.54	359.2	10.24	2.48	13.8	38.9	57.89	~300
1314	6.55	358.6	8.57	2.48	13.8	37.7	59.26	~300
1320	—	—	SAMPLE	—	—	—	—	—
1337	6.62	359.0	~~9.28~~ 5.13	2.26	13.6	-0.7	65.92	~300

Purge Cycle (End): 2317 @ ~60 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): 0.54
Total Purge Volume (Gallons): ~3.0
Purge Water Management: on site containment
Purge Observations (color, odor, turbidity, sheen): Clear grab sample
Purge time: 1256
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: 89.86
Sample ID: 021324NMW25S

Sampler Signature: [signature] Date: 02/13/24
QA/QC Signature: M. Kuy Date: 2/15/24

MICROPURGE SAMPLING LOG

Date: 02/13/24
Weather: Windy, 40's

Project Name: Bremo Power Station
Project No./Task No.: 31406066.009
Event: 1SA24 GW
Sampler(s): Z. Monashire
Well ID: MW-25D
Field Calibration Completed: 0815 on 02/13/24
Well Diameter: 2.0 inches
Initial Depth to Water: 49.00 feet
Depth to Bottom: ____ feet
Water Column Thickness: — feet

Equipment Used:
- [x] WL Indicator
- [x] YSI ProDSS 16C 103994
- [ ] 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
1355	6.42	240.4	20.33	1.49	13.7	32.1	49.13	~400
1358	6.42	239.8	11.72	1.39	13.7	30.8	49.13	~400
1401	6.42	239.6	9.43	1.32	13.7	30.0	49.14	~400
1404	6.42	239.4	8.67	1.23	13.7	30.0	49.15	~400
1410	—	—	SAMPLE	—	—	—	—	—
1422	6.42	237.1	8.93	1.25	13.6	31.3	49.17	~400

Purge Cycle (End): 2/6 @ ~65 psi
Flow Rate (ml/min End): ~400
Purge volume (gallons) prior to stabilization monitoring (3/8" I.D. Tube: Vol=Depth to Pump x 0.006 gal/ft): 0.90
Total Purge Volume (Gallons): ~3.5
Purge Water Management: onsite containment
Purge Observations (color, odor, turbidity, sheen): clear grab sample
Purge time: 1344
Sample Time: 1410
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: 150.25
Sample ID: 021324NMW25D

Sampler Signature: [signature] Date: 02/13/24
QA/QC Signature: M. Kuyf Date: 2/15/24

MICROPURGE SAMPLING LOG

Date: 2/13/24
Weather: sunny, 50's

Project Name: Bremo Power Station
Project No./Task No.: 31406066.009
Event: 1SA24 GW
Sampler(s): M. Khez
Well ID: MW-26S
Field Calibration Completed: 02/13/24 @ 0515
Well Diameter: 2.0 inches
Initial Depth to Water: 61.04 feet
Depth to Bottom: — feet
Water Column Thickness: — feet

Equipment Used:
- [x] WL Indicator
- [x] YSI Pro DSS 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)^{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
1520	5.48	107.2	4.8	8.70	14.6	139.2	61.54	~300
1523	5.47	107.3	4.6	8.77	14.5	157.9	61.57	~300
1526	5.48	107.4	7.1	8.80	14.5	161.0	61.63	~300
1529	5.48	107.5	4.5	8.78	14.5	165.9	61.61	~300
1535	—	—	—	SAMPLE	—	—	—	—
1550	5.50	107.7	2.9	8.91	14.5	169.6	61.70	~300

Purge Cycle (End): 13/7 @ 60 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): 0.612
Total Purge Volume (Gallons): ~2.5
Purge Water Management: on site containment
Purge Observations (color, odor, turbidity, sheen): clear grab sample
Purge time: 1513
Sample Time: 1535
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: 102.89
Sample ID: 021324NMW26S

Sampler Signature: M. Khez Date: 2/13/24
QA/QC Signature: [signature] Date: 02/15/2024

MICROPURGE SAMPLING LOG

Date: 2/13/24
Weather: sunny, windy, 50's

Project Name: Bremo Power Station
Project No./Task No.: 31406066.009
Event: 1SA24 GW
Sampler(s): M. Knez
Well ID: MW-26D
Field Calibration Completed: 2/13/24 @ 08:15
Well Diameter: 2.0 inches
Initial Depth to Water: 60.62 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 DSS22C103134
- [ ] 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
1436	6.00	412.7	6.8	3.31	14.9	76.2	61.23	~300
1439	6.09	421.2	6.6	2.65	14.8	52.5	61.18	~300
1442	6.13	422.7	6.1	2.49	14.8	42.1	61.21	~300
1445	6.18	423.2	5.7	2.52	14.8	30.0	61.23	~300
~~1449~~	—	—	—	change	air	tank	—	—
1455	—	—	—	SAMPLE	—	—	—	—
1506	6.27	411.3	4.6	1.47	14.4	13.2	61.71	~300

Purge Cycle (End): ~~25 psi~~ 2317 @ 60 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): 0.806
Total Purge Volume (Gallons): ~2.5
Purge Water Management: on site containment
Purge Observations (color, odor, turbidity, sheen): clear grab sample
Purge time: 1426
Sample Time: ~~1500~~ 1455
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: 134.47
Sample ID: 021324MW26D

Sampler Signature: M. Knez Date: 2/13/24
QA/QC Signature: [signature] Date: 02/15/2024

MICROPURGE SAMPLING LOG

Date: 02/13/2024
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-27S
Field Calibration Completed: 02/13/2024 @ 0815
Well Diameter: 2.0 inches
Initial Depth to Water: 44.68 feet
Depth to Bottom: – feet
Water Column Thickness: – feet

Equipment Used:
- [x] WL Indicator
- [x] YSI Pro DSS 23310253
- [ ] 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
1430	6.42	992	4.58	1.27	15.3	151.3	44.72	~200
1435	6.43	991	2.11	1.09	15.7	148.1	44.70	~200
1440	6.44	996	1.82	0.95	16.0	144.6	44.70	~200
1445	6.44	997	2.05	1.05	16.2	142.3	44.70	~200
1450	–	S	A	M	P	L	E SAMPLE	–
1508	6.46	990	1.55	0.75	15.1	134.0	44.673	~200

Purge Cycle (End): 25/5 @ ~60 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): 80.78 x .006 = .484
Total Purge Volume (Gallons): ~2.5
Purge Water Management: on site containment
Purge Observations (color, odor, turbidity, sheen): Clear grab sample
Purge time: 1420
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: 80.78
Sample ID: 021324NMW27S

Sampler Signature: Jeremy Davis Date: 02/13/2024
QA/QC Signature: M. Kurz Date: 2/15/24

MICROPURGE SAMPLING LOG

Date: 02/14/2024
Weather: Sunny 50s

Project Name: Bremo Power Station
Project No./Task No.: 31406066.009
Event: 1SA24 GW
Sampler(s): J. DAVIS
Well ID: MW-28
Field Calibration Completed: 02/14/2024 @ 0815
Well Diameter: 2.0 inches
Initial Depth to Water: 41.11 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
1330	6.04	513	57.42	2.96	13.7	75.0	42.98	~200
1335	6.00	514	34.18	2.30	13.6	89.1	42.50	~200
1340	6.01	514	24.67	3.37	13.3	97.6	42.00	~200
1345	6.00	514	31.35	3.37	13.4	106.0	41.73	~200
1350	5.99	516	22.39	3.44	13.3	113.2	42.00	~175
1355	5.98	517	15.82	1.65	13.7	116.6	42.31	~175
1400	6.00	519	7.00	1.56	13.8	118.8	42.73	~175
1405	-	S	A	M	P	L	E	-
1425	5.99	518	5.35	1.16	13.7	133.9	42.78	~200

Purge Cycle (End): 5218 @ ~40 psi
Flow Rate (ml/min End): ~200 ml/min
Purge volume (gallons) prior to stabilization monitoring (3/8" I.D. Tube: Vol=Depth to Pump x 0.006 gal/ft): 61.00 x .006 = ~.366
Total Purge Volume (Gallons): ~3.0
Purge Water Management: On site containment
Purge Observations (color, odor, turbidity, sheen): clear grab sample
Purge time: 1321 * 2515 → 5218
Sample Time: 1405
Field Filtered (0.45um): [ ] Yes [ ] 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 = 61.00
Sample ID: 021424NMW28

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

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APPENDIX D.2
FIELD DATA SHEETS
FIRST SEMI-ANNUAL VERIFICATION SAMPLING EVENT
(APRIL 2024)

MICROPURGE SAMPLING LOG

Date: 04/11/2024
Weather: Cloudy 60's

Project Name: Bremo Power Station
Project No./Task No.: 314060066.009
Event: North Pond Resample
Sampler(s): J. DAVIS
Well ID: MW-24
Field Calibration Completed: 04/11/2024 @ 0900
Well Diameter: 2.0 inches
Initial Depth to Water: 82.28 feet
Depth to Bottom: - feet
Water Column Thickness: - feet

Equipment Used:
- [X] WL Indicator
- [X] Turbidity Meter
- [ ] Air Tank
- [X] Dedicated Bladder Pump
- [X] YSI ProDSS ICE100132
- [ ] 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
1030	6.05	763	11.3	0.77	14.5	-23.3	86.13	~125
1035	6.11	757	9.68	0.73	14.9	-33.3	85.80	~125
1040	6.15	760	7.17	1.10	14.7	-33.8	85.88	425
1045	6.19	744	2.60	0.78	14.5	-37.0	86.58	~125
1050	-	S	A	M	P	L	E	-
1055	6.24	735	4.31	0.65	14.6	-40.2	87.42	~125

Purge Cycle (End): 52/8 seconds @ ~90 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): 151.12 x .006 = ~.906
Total Purge Volume (Gallons): ~1.0 Purge Water Management: On site containment
Purge Observations (color, odor, turbidity, sheen): clear grab sample
Purge Start Time: 1017

Sample Time: 1050 Field Filtered (0.45um): [ ] Yes [X] No

Sample Parameters/Analyte(s):
- [ ] VSWMR Table 3.1 Column A VOCs
- [ ] VSWMR Table 3.1 Column A Metals
- [ ] VSWMR Table 3.1 Column B
- [X] Other: Zinc

Other Observations / Equipment Operation Problems: DTP: 151.12
Sample ID: 041124NMW24

Sampler Signature: [signature] Date: 10 04/11/2024 Page 1 of 1
QA/QC Signature: [signature] Date: 4/12/24

MICROPURGE SAMPLING LOG

Date: 04/11/2024
Weather: Cloudy 60's

Project Name: Bremo Power Station
Project No./Task No.: 314060660.009
Event: North Pond Resample
Sampler(s): J. DAVIS
Well ID: MW-25D
Field Calibration Completed: 04/11/2024 @ 0800
Well Diameter: 2.0 inches
Initial Depth to Water: 47.06 feet
Depth to Bottom: - feet
Water Column Thickness: - feet

Equipment Used:
- [X] WL Indicator
- [X] YSI ProDSS 16G100132
- [ ] In Situ 9500 __
- [X] Turbidity Meter
- [ ] Ferrous Iron Kit
- [ ] MP-10 Controller Box
- [ ] Air Tank
- [ ] Compressor
- [X] MP-15 Controller Box
- [X] Dedicated Bladder Pump
- [ ] ~~Non-dedicated BP~~ 30 04/11/24
- [ ] ——

Time (5 minute int.)	pH (S.U.)	Sp. Cond. (uS/cm)	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
1120	6.23	234.1	54.4	1.98	13.8	56.8	48.12	~200
1125	6.23	234.2	44.2	2.00	13.8	54.2	48.22	~200
1130	6.23	234.3	40.1	1.93	13.9	53.8	48.20	~200
1135	6.22	232.0	33.6	1.80	13.9	51.8	48.21	~200
1140	6.22	233.4	30.9	1.76	14.0	53.9	48.18	~125
1145	6.22	234.1	25.4	1.62	14.1	51.3	48.16	~125
1150	6.22	233.8	32.6	1.45	13.8	50.8	48.20	~125
1155	6.21	232.9	30.3	1.35	13.9	52.7	48.20	~125
1200	6.22	234.0	28.9	1.29	14.1	48.7	48.20	~125
1205	6.22	233.0	22.6	1.23	14.0	50.0	48.21	~125
1210	6.22	234.1	23.2	1.15	14.0	47.1	48.20	~125
1215	6.23	234.3	18.5	1.04	14.0	47.5	48.20	~125
1220	6.23	234.1	13.60	1.14	14.0	45.4	48.18	~125
1225	6.24	234.0	14.15	1.09	13.9	46.2	48.20	~125
1230	6.24	233.0	11.13	1.10	13.9	47.0	48.22	~125
1235	6.25	234.0	10.5	1.07	14.0	45.3	48.21	~125
1240	6.25	233.4	9.44	1.03	14.0	45.0	48.30	~125

Purge Cycle (End): 52/8 Seconds @ ~60 psi
Flow Rate (ml/min End): ~125 ml/min
Purge volume (gallons) prior to stabilization monitoring (3/8" I.D. Tube: Vol=Depth to Pump x 0.006 gal/ft): 150.32 x .006 = ~.901
Total Purge Volume (Gallons): ~8.5
Purge Water Management: on site containment
Purge Observations (color, odor, turbidity, sheen): clear grab sample
Purge Time: 1109 # = 50/10 → 52/8
Sample Time: 1315
Field Filtered (0.45um): [ ] Yes [X] No

Sample Parameters/Analyte(s):
- [ ] VSWMR Table 3.1 Column A VOCs
- [ ] VSWMR Table 3.1 Column A Metals
- [ ] VSWMR Table 3.1 Column B
- [X] Other Silver

Other Observations / Equipment Operation Problems: DTP = 150.32

Signed Sampler: [signature] Date: 04/11/2024
QA/QC: [signature] Date: 4/12/24

MICROPURGE SAMPLING LOG

Date: 04/11/2024
Weather: Cloudy 60s

Project Name: Bremo Power Station
Project No./Task No.: 314060066.009
Event: North Pond Resample
Sampler(s): J. DAVIS
Well ID: MW-25D
Field Calibration Completed: 04/11/2024 @ 0800
Well Diameter: 2.0 inches
Initial Depth to Water: 47.06 feet
Depth to Bottom: — feet
Water Column Thickness: — feet

Equipment Used:
- [x] WL Indicator
- [x] Turbidity Meter
- [ ] Air Tank
- [ ] Dedicated Bladder Pump
- [x] YSI ProDSS 16E100132
- [ ] Ferrous Iron Kit
- [ ] Compressor
- [x] ~~Non-dedicated BP~~ JD 04/11/24
- [ ] In Situ 9500 —
- [ ] MP-10 Controller Box
- [x] MP-15 Controller Box
- [ ] —

Time (5 minute int.)	pH (S.U.)	Sp. Cond. (uS/cm)	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	6.26	233.3	8.41	1.10	13.9	43.9	48.24	~125
1250	6.26	233.2	8.77	1.10	14.0	45.5	48.26	~125
1255	6.27	233.0	7.81	1.09	13.9	45.4	48.25	~125
1300	6.27	233.1	13.7	1.00	14.0	45.7	48.27	~125
1305	6.28	232.7	6.45	1.04	13.9	43.7	48.26	~125
1310	~~6.27~~ 6.27	233.2	4.32	1.10	13.9	44.1	48.25	~125
1315	-	S	A	M	P	L	E	—
1325	6.27	234.3	5.69	1.06	14.0	42.3	48.32	~125

Purge Cycle (End): 5218 Seconds @ ~60 psi
Flow Rate (ml/min End): ~125 mL/min
Purge volume (gallons) prior to stabilization monitoring (3/8" I.D. Tube: Vol=Depth to Pump x 0.006 gal/ft): ~.901
Total Purge Volume (Gallons): 48.5
Purge Water Management: On site containment
Purge Observations (color, odor, turbidity, sheen): Clear grab sample
Purge Time: 1109
Sample Time: 1315
Field Filtered (0.45um): [ ] Yes [x] No

Sample Parameters/Analyte(s):
- [ ] VSWMR Table 3.1 Column A VOCs
- [ ] VSWMR Table 3.1 Column A Metals
- [ ] VSWMR Table 3.1 Column B
- [x] Other Silver

Other Observations / Equipment Operation Problems:

Signed Sampler: [signature] Date: 04/11/2024
Page 2 of 2
QA/QC: [signature] Date: 4/12/24

MICROPURGE SAMPLING LOG

Date: 04/11/2024
Weather: Cloudy 60's

Project Name: Bremo Power Station
Project No./Task No.: 31406006.009
Event: North Pond Resample
Sampler(s): J. DAVIS
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:
- ☐ WL Indicator
- ☐ Turbidity Meter
- ☐ Air Tank
- ☐ Dedicated Bladder Pump
- ☐ YSI ProDSS
- ☐ Ferrous Iron Kit
- ☐ Compressor
- ☒ ~~Non-dedicated BP~~ JP 04/11/24
- ☐ In Situ 9500
- ☐ MP-10 Controller Box
- ☐ MP-15 Controller Box
- ☐ –

Time (5 minute int.)	pH (S.U.)	Sp. Cond. (uS/cm)	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
1320	–	S	A	M	P	C	E	–

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 near MW-25D using lab provided DI water
Purge Time: –
Sample Time: 1320
Field Filtered (0.45um): ☐ Yes ☒ No

Sample Parameters/Analyte(s):
- ☐ VSWMR Table 3.1 Column A VOCs
- ☐ VSWMR Table 3.1 Column A Metals
- ☐ VSWMR Table 3.1 Column B
- ☒ Other: Silver and zinc

Other Observations / Equipment Operation Problems:

Signed Sampler: [signature] Date: 04/11/2024
Page 1 of 1

QC/QA: [signature] Date: 4/12/24

APPENDIX D.3

FIELD DATA SHEETS

SECOND SEMI-ANNUAL GROUNDWATER MONITORING EVENT

(AUGUST 2024)

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: ~~08/26/24~~
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

MICROPURGE SAMPLING LOG

Date: 08/27/24
Weather: Sunny, 90s

Project Name: Bremo Power Station
Project No./Task No.: 31406066.009
Event: 2SA24 GW
Sampler(s): Z. Mondshine
Well ID: MW24
Field Calibration Completed: 0830 on 08/27/24
Well Diameter: 20 inches
Initial Depth to Water: 84.42 feet
Depth to Bottom: 156.40 feet
Water Column Thickness: 71.98 feet

Equipment Used:
- [x] WL Indicator
- [x] Turbidity Meter 19007
- [ ] Air Tank
- [x] Dedicated Bladder Pump
- [x] YSI PODS18L104692
- [ ] 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
1130	6.19	609	9.39	0.82	17.2	-52.8	88.40	~200
1135	6.22	598	6.04	0.77	17.2	-54.7	89.12	~200
1140	6.24	587	2.96	0.72	17.2	-55.3	89.99	~200
1145	6.26	573	11.8	0.67	17.2	-55.2	90.02	~200
1150	6.28	565	18.7	0.64	17.3	-55.7	90.56	~200
1155	6.30	553	17.7	0.62	17.3	-56.2	90.85	~200
1200	6.33	538	18.1	0.59	17.2	-57.0	91.29	~200
1205	6.36	526	2nd 08/27/24 ~~13~~ 13.1	0.58	17.3	-58.2	91.66	~200
1210	6.38	506	9.36	0.57	17.1	-58.4	91.83	~200
1215	6.39	497.7	8.54	0.55	17.2	-56.9	91.94	~200
1220	6.39	494.5	7.22	0.55	17.2	-55.5	92.06	~200
1225	—	—	SAMPLE	—	—	—	—	—
1255	6.42	461.3	3.58	0.48	16.9	-37.5	94.71	~200

Purge Cycle (End): 50/10 seconds @ 80 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): 0.90
Total Purge Volume (Gallons): ~4.5
Purge Water Management: on site containment
Purge Observations (color, odor, turbidity, sheen): clear grab sample
Purge Start Time: 1112
Sample Time: 1225
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: 149.63 Field Dup taken here @ 1230
Sample ID: 082724NMW24 082724NMFDDuplicate

Sampler Signature: Z. Mondshine Date: 08/27/24 Page 1 of 1
QA/QC Signature: [signature] Date: 09/03/2024

MICROPURGE SAMPLING LOG

Date: 08/27/24
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 - NP
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 08/27/24
- [x] ~~Turbidity Meter~~ ZM 08/27/24
- [ ] Air Tank
- [x] ~~Dedicated Bladder Pump~~ ZM 08/27/24
- [x] ~~YSI~~ ZM 08/27/24
- [ ] Peristaltic Pump
- [ ] Compressor
- [ ] Non-dedicated BP
- [ ] In-Situ —
- [ ] MP-10 Controller Box
- [x] ~~MP-15 Controller Box~~ ZM 08/27/24
- [ ] —

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
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: on site containment
Purge Observations (color, odor, turbidity, sheen): Clear grab sample taken from MW24
Purge Start Time: —

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: 082724NNPFDDuplicate

Sampler Signature: [signature] Date: 08/27/24
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. Mondshine
Well ID: MW25D
Field Calibration Completed: 0645 on 08/26/24
Well Diameter: 2.0 inches
Initial Depth to Water: 49.24 feet
Depth to Bottom: 159.36 feet
Water Column Thickness: 110.12 feet

Equipment Used:
- [x] WL Indicator
- [x] Turbidity Meter 23008
- [ ] Air Tank
- [x] Dedicated Bladder Pump
- [x] YSI PROSS18L104692
- [ ] 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
1450	6.06	244.7	19.5	2.31	16.0	61.6	49.39	~400
1453	6.00	242.9	13.9	2.15	15.9	61.8	49.40	~400
1456	5.83	238.8	14.8	2.07	15.7	71.7	49.38	~400
1459	5.75	228.6	14.4	2.14	15.8	78.7	49.40	~400
1502	5.72	228.0	13.8	2.12	15.7	80.5	49.41	~400
1505	5.71	228.4	13.9	2.08	15.7	81.8	49.42	~400
1508	5.72	228.8	13.1	1.96	15.6	80.9	49.41	~400
1511	5.74	226.0	11.6	1.88	15.6	80.3	49.41	~400
1514	5.74	227.2	10.8	1.98	15.7	80.0	49.39	~400
1517	—	—	change	air tank	—	—	—	—
1520	5.76	229.9	9.92	1.99	15.8	78.2	49.39	~400
1523	5.80	229.1	7.98	1.78	15.8	76.2	49.40	~400
1526	5.82	226.1	7.56	1.74	15.6	75.4	49.40	~400
1530	—	—	SAMPLE	—	—	—	—	—
1545	5.89	227.0	6.06	1.68	15.8	65.5	49.42	~400

Purge Cycle (End): 2416 seconds @ 65 psi
Flow Rate (ml/min End): ~400
Purge volume (gallons) prior to stabilization monitoring (3/8" I.D. Tube: Vol=Depth to Pump x 0.006 gal/ft): 0.90
Total Purge Volume (Gallons): ~5.0
Purge Water Management: on site containment
Purge Observations (color, odor, turbidity, sheen): clear grab sample
Purge Start Time: 1439
Sample Time: 1530
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: 150.25
Sample ID: 082624NMW25D

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

MICROPURGE SAMPLING LOG

Date: 08/27/24
Weather: Sunny, 90s

Project Name: Bremo Power Station
Project No./Task No.: 31406066.009
Event: 2SA24 GW
Sampler(s): Z. Mordshine
Well ID: MW25S
Field Calibration Completed: 0830 on 08/27/24
Well Diameter: 2.0 inches
Initial Depth to Water: 48.23 feet
Depth to Bottom: 98.66 feet
Water Column Thickness: 50.43 feet

Equipment Used:
- [x] WL Indicator
- [x] Turbidity Meter 19007
- [ ] Air Tank
- [x] Dedicated Bladder Pump
- [x] YSI Pro DSS 18L104692
- [ ] 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
1317	6.59	352.2	3.73	1.52	16.5	40.0	54.45	~300
1330	6.57	350.4	1.89	1.51	16.4	41.8	58.27	~300
1333	6.57	349.4	2.16	1.46	16.4	39.7	59.64	~300
1336	6.58	348.6	1.77	1.48	16.4	32.8	60.12	~300
1340			SAMPLE					
1355	6.61	344.7	1.45	1.50	16.3	18.6	55.58	~300

Purge Cycle (End): 2317 seconds @ 60 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): 0.54
Total Purge Volume (Gallons): ~30
Purge Water Management: onsite containment
Purge Observations (color, odor, turbidity, sheen): clear grab sample
Purge Start Time: 1316
Sample Time: 1340
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: 89.88
Sample ID: 082724NMW25S

Sampler Signature: [signature] Date: 08/27/24
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 Mondshine
Well ID: MW-26D
Field Calibration Completed: 1045 on 08/26/24
Well Diameter: 2.0 inches
Initial Depth to Water: 61.66 feet
Depth to Bottom: 139.88 feet
Water Column Thickness: 78.22 feet

Equipment Used:
- [x] WL Indicator
- [x] YSI Pro DSS 18J104692
- [ ] In-Situ —
- [x] Turbidity Meter 23009
- [ ] 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
1255	6.17	407.1	2.63	2.06	18.5	13.7	62.37	~300
1258	6.21	401.4	1.67	1.83	18.2	5.5	62.42	~300
1301	6.23	398.9	0.86	1.64	18.0	-4.4	62.44	~300
1304	6.26	397.9	1.78	1.68	18.0	-12.6	62.41	~300
1307	6.28	397.9	3.31	1.69	18.0	-18.7	62.43	~300
1310	—	—	SAMPLE	—	—	—	—	~300
1330	6.35	386.0	1.08	1.72	18.1	-22.8	62.45	~300

Purge Cycle (End): 2218 seconds @ 60 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): 0.81
Total Purge Volume (Gallons): ~25
Purge Water Management: on site containment
Purge Observations (color, odor, turbidity, sheen): clear grab sample
Purge Start Time: 1245
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: 134.47
Sample ID: 082624NMW26D

Sampler Signature: [signature] Date: 08/26/24
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. Mondshine
Well ID: MW-26S
Field Calibration Completed: 0645 on 08/26/24
Well Diameter: 2.0 inches
Initial Depth to Water: 62.05 feet
Depth to Bottom: 110.37 feet
Water Column Thickness: ~~58.32~~ 48.32 feet (MP 9/16/24)

Equipment Used:
- [x] WL Indicator
- [x] YSI ProDSS 18L104692
- [ ] In-Situ —
- [x] Turbidity Meter 23008
- [ ] 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
1350	5.59	142.6	~~1.08~~ 101 (2nd pump 08/26/24)	~~10.87~~	16.8	203.8	62.54	~300
1353	5.62	143.1	4.20	9.06	16.8	207.5	62.55	~300
1356	5.63	143.0	2.04	9.16	16.7	210.5	62.52	~300
1359	5.63	142.7	1.01	9.24	16.6	213.3	62.53	~300
1400	—	—	SAMPLE	—	—	—	—	—
1430	5.58	145.2	0.86	9.35	16.5	220.8	62.54	~300

Purge Cycle (End): 13/7 seconds @ 55 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): 0.62
Total Purge Volume (Gallons): ~3.0
Purge Water Management: onsite containment
Purge Observations (color, odor, turbidity, sheen): clear grab sample
Purge Start Time: 1343
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: 102.89
Sample ID: 082624NMW26S

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

MICROPURGE SAMPLING LOG

Date: 08/27/2024
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-270
Field Calibration Completed: 08/27/2024 @ 0830
Well Diameter: 2.0 inches
Initial Depth to Water: 42.13 feet
Depth to Bottom: 200.60 feet
Water Column Thickness: 158.47 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)°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
1325	6.46	990	5.17	1.27	17.2	-35.9	49.25	~300
1330	6.37	1071	3.63	1.08	17.0	-23.2	52.52	~300
1335	6.26	1050	2.20	1.17	17.2	13.3	55.04	~300
1340	6.26	1049	2.93	1.25	17.5	25.3	56.82	~300
1345	6.23	1042	2.32	1.16	17.1	35.2	60.06	~300
1350	—	S	A	M	P	L	E	—
1430 ~~1355~~	6.30	1041	1.98	1.59	18.2	58.2	83.51	~300

Purge Cycle (End): 19/11 seconds @ ~100 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): 200.60x.006=~1.20
Total Purge Volume (Gallons): ~4.0
Purge Water Management: On site containment
Purge Observations (color, odor, turbidity, sheen): Clear grab sample
Purge Start Time: 1315 * change air tank
Sample Time: 1350
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: ? 200.00 (200.60 based on depth to bottom on well info table)
Sample ID: 082724NMW27D / 082724NPMSD, 082724NPMS

Sampler Signature: [signature] Date: 08/27/2024 Page 1 of 1
QA/QC Signature: _____ Date: _____

MICROPURGE SAMPLING LOG

Date: 08/27/2024
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-27S
Field Calibration Completed: 08/27/2024 @ 0830
Well Diameter: 2.0 inches
Initial Depth to Water: 43.63 feet
Depth to Bottom: 90.14 feet
Water Column Thickness: 46.51 feet

Equipment Used:
- [x] WL Indicator SP08127424
- [x] Turbidity Meter 21022
- [ ] Air Tank
- [x] Dedicated Bladder Pump
- [x] YSI Pro DSS 10M15F3105153
- [ ] 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
1455	6.33	994	2.02	1.05	16.8	113.9	43.86	~300
1500	6.38	993	1.73	0.93	16.3	111.9	43.70	~300
1505	6.36	991	1.85	0.87	16.6	110.7	43.73	~300
1510	6.34	971	1.79	0.84	16.7	108.7	43.75	~300
1515	-	S	A	M	P	L	E	-
1525	6.35	961	1.83	0.94	16.5	104.2	43.91	~300

Purge Cycle (End): 2515 seconds @ ~60 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): 80.82 x .006 = .484
Total Purge Volume (Gallons): ~4.0
Purge Water Management: on site containment
Purge Observations (color, odor, turbidity, sheen): clear grab sample
Purge Start Time: 1446
Sample Time: 1515
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: 80.82
Sample ID: 082724NMW27S

Sampler Signature: [signature] Date: 08/27/2024
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-28
Field Calibration Completed: 08/26/2024 @ 0645
Well Diameter: 2.0 inches
Initial Depth to Water: 41.42 feet
Depth to Bottom: 69.16 feet
Water Column Thickness: 27.74 feet

Equipment Used:
- [x] WL Indicator
- [x] Turbidity Meter 21022
- [ ] Air Tank
- [x] Dedicated Bladder Pump
- [x] YSI ProDSS 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)°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
1450	5.96	541	4.44	2.42	15.8	125.8	42.46	~200
1455	5.94	541	7.95	2.44	15.6	137.3	43.50	~200
1500	5.93	550	7.22	1.93	15.1	145.2	44.02	~200
1505	5.91	550	4.62	1.62	15.2	150.8	44.14	~200
1510	5.90	550	4.05	1.55	15.1	154.7	44.45	~200
1515	-	S	A	M	P	L	E	-
1530	5.97	558	3.53	1.60	14.9	150.2	44.28	~200

Purge Cycle (End): 24/6 seconds @ ~40 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): 61.00x.006=~.366
Total Purge Volume (Gallons): ~2.0
Purge Water Management: on site containment
Purge Observations (color, odor, turbidity, sheen): clear grab sample
Purge Start Time: 1440
Sample Time: 1515
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: 61.00
Sample ID: 082624NMW28

Sampler Signature: [signature] Date: 08/26/2024
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: 08/27/24
Weather: Sunny, 90s

Project Name: Bremo Power Station
Project No./Task No.: 31406066.009
Event: 2SA24 GW
Sampler(s): Z. Mondshine
Well ID: MW33
Field Calibration Completed: 0830 on 08/27/24
Well Diameter: 2.0 inches
Initial Depth to Water: 95.06 feet
Depth to Bottom: 136.35 feet
Water Column Thickness: 41.29 feet

Equipment Used:
- [x] WL Indicator
- [x] Turbidity Meter 19007
- [ ] Air Tank
- [x] Dedicated Bladder Pump
- [x] YSI Pro DSS 18L104692
- [ ] 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
1430	6.42	569	3.94	3.80	22.9	19.0	98.31	~150
1435	6.47	579	2.79	3.45	22.5	29.1	99.56	~150
1440	—	change air tank						~150 08/27/24
1445	6.53	596	2.36	3.95	22.6	24.9	101.22	~150
1450	6.53	538	1.72	3.23	22.7	28.5	102.65	~150
1455	6.58	520	1.65	3.15	22.5	37.9	103.72	~150
1500	6.60	511	1.05	3.31	22.5	46.4	105.01	~150
1505	6.62	506	0.88	3.44	22.3	51.2	106.17	~150
1510	—	—	SAMPLE	—	—	—	—	—
1530	~~6.66~~ 6.66	512	1.00	~~3.53~~ 3.53 9/6/24	22.5	47.8	111.34	~150

Purge Cycle (End): 18112 seconds @ 85 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): 0.78
Total Purge Volume (Gallons): ~2.5
Purge Water Management: on site containment
Purge Observations (color, odor, turbidity, sheen): clear grab sample
Purge Start Time: 1415
Sample Time: 1510
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: 129.59
Sample ID: 082724NMW33

Sampler Signature: [signature] Date: 08/27/24
QA/QC Signature: [signature] Date: 09/03/2024

MICROPURGE SAMPLING LOG

Date: 08/27/24
Weather: sunny, 90s

Project Name: Bremo Power Station
Project No./Task No.: 31406066.009
Event: 2SA24 GW
Sampler(s): Z. Mondshine
Well ID: MW34
Field Calibration Completed: 0830 on 08/27/24
Well Diameter: 2.0 inches
Initial Depth to Water: 94.73 feet
Depth to Bottom: 154.02 feet
Water Column Thickness: 59.29 feet

Equipment Used:
- [x] WL Indicator
- [x] Turbidity Meter 19007
- [ ] Air Tank
- [x] Dedicated Bladder Pump
- [x] YSI ProDSS 18L104692
- [ ] 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
1600	6.02	378.3	5.22	1.60	18.2	430.0	95.06	~250
1605	6.02	378.0	3.51	1.56	18.2	499.8	95.09	~250
1610	6.01	376.5	2.13	1.52	18.0	539.0	95.11	~250
1615	6.01	374.9	1.93	1.37	17.8	543.8	95.13	~250
1620	6.00	374.1	0.94	1.35	17.6	548.0	95.14	~250
1625	—	—	SAMPLE	—	—	—	—	—
1640	5.97	372.0	0.48	1.19	17.3	560.6	95.24	~250

Purge Cycle (End): 23/7 seconds @ 65 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): 0.79
Total Purge Volume (Gallons): ~3.0
Purge Water Management: on site containment
Purge Observations (color, odor, turbidity, sheen): clear grab sample
Purge Start Time: 1549
Sample Time: 1625
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: 131.24
Sample ID: 082724NMW34

Sampler Signature: [signature] Date: 08/27/24
QA/QC Signature: [signature] Date: 09/03/2024

MICROPURGE SAMPLING LOG

Date: 08/27/2024
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-35
Field Calibration Completed: 08/27/2024 @ 0930
Well Diameter: 2.0 inches
Initial Depth to Water: 106.24 feet
Depth to Bottom: 136.00 feet
Water Column Thickness: 29.76 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
1120	6.07	464.1	134	1.25	16.4	17.8	106.60	~300
1125	6.11	463.2	207	1.03	16.4	6.2	106.51	~300
1130	6.18	462.9	49.1	0.73	16.2	-2.8	106.75	~300
1135	6.20	463.0	45.2	0.71	16.4	-4.5	106.63	~300
1140	6.22	462.8	35.2	0.67	16.2	-5.6	106.58	~300
1145	6.23	462.3	17.5	0.62	16.2	-6.3	106.74	~300
1150	6.24	463.8	11.0	0.58	16.3	-7.2	106.75	~300
1155	6.25	459.9	13.2	0.51	16.4	-7.7	106.65	~300
1200	6.26	457.0	24.2	0.56	18.1	-11.6	106.67	~300
1205	6.31	464.0	9.51	0.59	17.2	-7.6	106.63	~300
1210	6.31	469.1	15.7	0.60	17.5	-7.9	106.75	~300
* 1215	6.35	462.1	10.1	0.68	17.7	-10.3	106.69	~300
1220	6.41	461.4	9.56	0.64	17.1	-9.4	106.78	~300
1225	6.46	460.2	8.21	0.61	16.6	-8.9	106.70	~300
1230	6.40	458.2	7.91	0.52	16.5	-7.9	106.72	~300
1235	-	S	A	M	P	L	E	-
1250	6.38	453.2	6.71	0.71	16.5	-8.4	106.84	~300

Purge Cycle (End): 2218 seconds @ ~80 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): 126.60x.006=~.759
Total Purge Volume (Gallons): ~8.0
Purge Water Management: on site containment
Purge Observations (color, odor, turbidity, sheen): clear grab sample
Purge Start Time: 1113 1216 change air tank
Sample Time: 1235
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: 126.60
Sample ID: 082724NMW28

Sampler Signature: [signature] Date: 08/27/2024 Page 1 of 1
QA/QC Signature: [signature] Date: 09/03/2024

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APPENDIX E
LABORATORY ANALYTICAL RESULTS

APPENDIX E.1
LABORATORY ANALYTICAL RESULTS
FIRST SEMI-ANNUAL GROUNDWATER MONITORING EVENT
(FEBRUARY 2024)

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

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

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	

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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	

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_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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REPORT OF LABORATORY ANALYSIS

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

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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(704)875-9092

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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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																													
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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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Radiochemistry by Method 903.0/9315 6

Radiochemistry by Method 904/9320 7

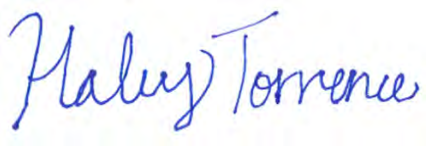
Gl: Glossary of Terms 8

Al: Accreditations & Locations 9

Sc: Sample Chain of Custody 10

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

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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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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(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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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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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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Huntersville, NC 28078
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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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(704)875-9092

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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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	

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_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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REPORT OF LABORATORY ANALYSIS

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Huntersville, NC 28078
(704)875-9092

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

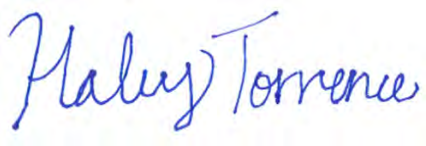
021224NMW29D L1706891-02 Non-Potable Water

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.

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_C
Pace Project No.: 92713247

Dear Kelly Hicks:

Enclosed are the analytical results for sample(s) received by the laboratory between February 14, 2024 and 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_C
Pace Project No.: 92713247

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

SAMPLE SUMMARY

Project: Bremo_1SA2024_CCR&VSWMR_P_C
Pace Project No.: 92713247

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92713247001	**021324NMW34**	Water	02/13/24 15:40	02/14/24 10:18
92713247002	**021424NMW24**	Water	02/14/24 12:40	02/15/24 10:10
92713247003	**021424NMW27D**	Water	02/14/24 13:40	02/15/24 10:10
92713247004	**021424NMW33**	Water	02/14/24 12:05	02/15/24 10:10
92713247005	**021424NMW35**	Water	02/14/24 12:10	02/15/24 10:10
92713247006	**021424NNPFDDUPLICATE**	Water	02/14/24 12:20	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_C
Pace Project No.: 92713247

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92713247001	**021324NMW34**	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	JAY	1	PASI-A
		EPA 350.1 Rev 2.0 1993	NCF	1	PASI-A
		EPA 9056A	CDC	4	PASI-A
92713247002	**021424NMW24**	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
92713247003	**021424NMW27D**	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	RVS	1	PASI-A
		EPA 350.1 Rev 2.0 1993	NCF	1	PASI-A
		EPA 9056A	JCM	4	PASI-A
92713247004	**021424NMW33**	EPA 7199	ICO	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	NCF	1	PASI-A
		EPA 9056A	JCM	4	PASI-A
92713247005	**021424NMW35**	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
92713247006	**021424NNPFDDUPLICATE**	EPA 7199	ICO	1	PASI-C
		EPA 6010D	DBB1	16	PASI-A

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(704)875-9092

SAMPLE ANALYTE COUNT

Project: Bremo_1SA2024_CCR&VSWMR_P_C
Pace Project No.: 92713247

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

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_C
Pace Project No.: 92713247

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92713247001	**021324NMW34**					
EPA 7199	Chromium, Hexavalent	0.31	ug/L	0.050	02/14/24 18:01	H1,M1
EPA 6010D	Barium	40.8	ug/L	5.0	02/22/24 13:50	
EPA 6010D	Boron	1400	ug/L	50.0	02/22/24 13:50	
EPA 6010D	Calcium	35300	ug/L	100	02/22/24 13:50	
EPA 6010D	Nickel	0.90J	ug/L	5.0	02/22/24 13:50	
EPA 6010D	Hardness, Total(SM 2340B)	143000	ug/L	662	02/22/24 13:50	
EPA 6020B	Lithium	7.1	ug/L	2.5	02/16/24 00:32	
EPA 6020B	Manganese	4.3	ug/L	2.0	02/16/24 00:32	
EPA 7470A	Mercury	0.15J	ug/L	0.20	02/20/24 09:57	
SM 2540C-2015	Total Dissolved Solids	254	mg/L	10.0	02/20/24 15:34	
EPA 350.1 Rev 2.0 1993	Nitrogen, Ammonia	0.045J	mg/L	0.10	03/06/24 23:59	
EPA 9056A	Chloride	12.7	mg/L	1.0	02/15/24 04:15	
EPA 9056A	Fluoride	0.052J	mg/L	0.10	02/15/24 04:15	M1
EPA 9056A	Sulfate	37.4	mg/L	1.0	02/15/24 04:15	
92713247002	**021424NMW24**					
EPA 6010D	Barium	69.4	ug/L	5.0	02/20/24 19:17	
EPA 6010D	Boron	195	ug/L	50.0	02/20/24 19:17	
EPA 6010D	Calcium	62400	ug/L	100	02/21/24 11:58	
EPA 6010D	Copper	10.1	ug/L	5.0	02/21/24 11:58	B
EPA 6010D	Molybdenum	4.3J	ug/L	5.0	02/21/24 11:58	
EPA 6010D	Nickel	1.3J	ug/L	5.0	02/21/24 11:58	
EPA 6010D	Hardness, Total(SM 2340B)	200000	ug/L	662	02/21/24 11:58	
EPA 6010D	Zinc	12.0	ug/L	10.0	02/21/24 11:58	
EPA 6020B	Cobalt	60.4	ug/L	1.0	02/20/24 05:38	
EPA 6020B	Iron	5980	ug/L	250	02/20/24 15:17	L2
EPA 6020B	Lead	0.13J	ug/L	1.0	02/20/24 05:38	
EPA 6020B	Lithium	2.7	ug/L	2.5	02/20/24 05:38	
EPA 6020B	Manganese	3130	ug/L	40.0	02/20/24 15:22	
SM 2540C-2015	Total Dissolved Solids	305	mg/L	10.0	02/20/24 16:57	
EPA 350.1 Rev 2.0 1993	Nitrogen, Ammonia	0.53	mg/L	0.10	03/07/24 00:11	
EPA 9056A	Chloride	16.8	mg/L	1.0	02/16/24 00:03	
EPA 9056A	Fluoride	0.061J	mg/L	0.10	02/16/24 00:03	
EPA 9056A	Sulfate	36.7	mg/L	1.0	02/16/24 00:03	
92713247003	**021424NMW27D**					
EPA 7199	Chromium, Hexavalent	0.025	ug/L	0.025	02/15/24 12:39	
EPA 6010D	Barium	22.4	ug/L	5.0	02/21/24 12:49	
EPA 6010D	Boron	1180	ug/L	50.0	02/20/24 20:14	
EPA 6010D	Calcium	67100	ug/L	100	02/21/24 12:49	
EPA 6010D	Copper	1.2J	ug/L	5.0	02/21/24 12:49	B
EPA 6010D	Nickel	1.8J	ug/L	5.0	02/21/24 12:49	
EPA 6010D	Silver	1.4J	ug/L	5.0	02/21/24 12:49	
EPA 6010D	Hardness, Total(SM 2340B)	292000	ug/L	662	02/21/24 12:49	
EPA 6010D	Zinc	8.3J	ug/L	10.0	02/21/24 12:49	
EPA 6020B	Cobalt	0.45J	ug/L	1.0	02/20/24 05:42	
EPA 6020B	Iron	462	ug/L	50.0	02/20/24 05:42	L2
EPA 6020B	Lithium	26.5	ug/L	2.5	02/20/24 05:42	

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SUMMARY OF DETECTION

Project: Bremo_1SA2024_CCR&VSWMR_P_C
Pace Project No.: 92713247

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92713247003	**021424NMW27D**					
EPA 6020B	Manganese	212	ug/L	4.0	02/20/24 15:27	
SM 2540C-2015	Total Dissolved Solids	666	mg/L	50.0	02/17/24 01:33	
EPA 9056A	Chloride	12.3	mg/L	1.0	02/16/24 01:04	
EPA 9056A	Fluoride	0.13	mg/L	0.10	02/16/24 01:04	
EPA 9056A	Sulfate	191	mg/L	4.0	02/16/24 12:03	
92713247004	**021424NMW33**					
EPA 7199	Chromium, Hexavalent	0.060	ug/L	0.025	02/15/24 11:00	
EPA 6010D	Barium	15.7	ug/L	5.0	02/20/24 19:20	
EPA 6010D	Boron	269	ug/L	50.0	02/20/24 19:20	
EPA 6010D	Calcium	75000	ug/L	100	02/21/24 12:01	
EPA 6010D	Copper	3.0J	ug/L	5.0	02/21/24 12:01	B
EPA 6010D	Nickel	1.3J	ug/L	5.0	02/20/24 19:20	
EPA 6010D	Hardness, Total(SM 2340B)	250000	ug/L	662	02/21/24 12:01	
EPA 6010D	Vanadium	2.0J	ug/L	5.0	02/21/24 12:01	
EPA 6010D	Zinc	17.4	ug/L	10.0	02/20/24 19:20	
EPA 6020B	Cobalt	0.074J	ug/L	1.0	02/20/24 05:56	
EPA 6020B	Iron	85.7	ug/L	50.0	02/20/24 05:56	L2
EPA 6020B	Lead	0.11J	ug/L	1.0	02/20/24 05:56	
EPA 6020B	Lithium	3.5	ug/L	2.5	02/20/24 05:56	
EPA 6020B	Manganese	17.6	ug/L	2.0	02/20/24 05:56	
SM 2540C-2015	Total Dissolved Solids	329	mg/L	10.0	02/17/24 01:34	
EPA 9056A	Chloride	12.1	mg/L	1.0	02/15/24 23:17	
EPA 9056A	Fluoride	0.079J	mg/L	0.10	02/15/24 23:17	
EPA 9056A	Nitrate as N	0.14	mg/L	0.10	02/15/24 23:17	
EPA 9056A	Sulfate	30.9	mg/L	1.0	02/15/24 23:17	
92713247005	**021424NMW35**					
EPA 6010D	Barium	77.2	ug/L	5.0	02/20/24 19:23	
EPA 6010D	Boron	557	ug/L	50.0	02/20/24 19:23	
EPA 6010D	Calcium	56200	ug/L	100	02/21/24 12:03	
EPA 6010D	Chromium	1.3J	ug/L	5.0	02/21/24 12:03	
EPA 6010D	Hardness, Total(SM 2340B)	181000	ug/L	662	02/21/24 12:03	
EPA 6020B	Cobalt	0.45J	ug/L	1.0	02/20/24 06:01	
EPA 6020B	Iron	1710	ug/L	50.0	02/20/24 06:01	L2
EPA 6020B	Lithium	19.8	ug/L	2.5	02/20/24 06:01	
EPA 6020B	Manganese	726	ug/L	10.0	02/20/24 15:31	
SM 2540C-2015	Total Dissolved Solids	285	mg/L	10.0	02/20/24 16:58	
EPA 9056A	Chloride	10.1	mg/L	1.0	02/15/24 23:32	
EPA 9056A	Fluoride	0.057J	mg/L	0.10	02/15/24 23:32	
EPA 9056A	Sulfate	36.0	mg/L	1.0	02/15/24 23:32	
92713247006	**021424NNPFDDUPLICATE**					
EPA 6010D	Barium	80.3	ug/L	5.0	02/20/24 19:25	
EPA 6010D	Boron	580	ug/L	50.0	02/20/24 19:25	
EPA 6010D	Calcium	57800	ug/L	100	02/21/24 12:06	
EPA 6010D	Chromium	1.4J	ug/L	5.0	02/21/24 12:06	
EPA 6010D	Hardness, Total(SM 2340B)	187000	ug/L	662	02/21/24 12:06	
EPA 6020B	Cobalt	0.44J	ug/L	1.0	02/20/24 06:05	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: Bremo_1SA2024_CCR&VSWMR_P_C
Pace Project No.: 92713247

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92713247006	**021424NNPFDDUPLICATE**					
EPA 6020B	Iron	1550	ug/L	50.0	02/20/24 06:05	L2
EPA 6020B	Lithium	18.8	ug/L	2.5	02/20/24 06:05	
EPA 6020B	Manganese	705	ug/L	10.0	02/20/24 15:36	
SM 2540C-2015	Total Dissolved Solids	288	mg/L	10.0	02/20/24 16:59	
EPA 9056A	Chloride	10.1	mg/L	1.0	02/15/24 23:48	
EPA 9056A	Fluoride	0.055J	mg/L	0.10	02/15/24 23:48	
EPA 9056A	Sulfate	36.0	mg/L	1.0	02/15/24 23:48	

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PROJECT NARRATIVE

Project: Bremo_1SA2024_CCR&VSWMR_P_C
Pace Project No.: 92713247

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

General Information:
6 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.
- 021324NMW34 (Lab ID: 92713247001)

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: 832217

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92713247001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
- MS (Lab ID: 4300570)
  - Chromium, Hexavalent
- MSD (Lab ID: 4300571)
  - Chromium, Hexavalent

Additional Comments:

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PROJECT NARRATIVE

Project: Bremo_1SA2024_CCR&VSWMR_P_C
Pace Project No.: 92713247

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

General Information:
6 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_C
Pace Project No.: 92713247

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

General Information:
6 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_C
Pace Project No.: 92713247

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

General Information:
6 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_C
Pace Project No.: 92713247

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

General Information:
6 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_C
Pace Project No.: 92713247

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

General Information:
6 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_C
Pace Project No.: 92713247

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

General Information:
6 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: 832355

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92712989006,92713247001

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

- MS (Lab ID: 4301589)
  - Fluoride
- MS (Lab ID: 4301591)
  - Fluoride
- MSD (Lab ID: 4301590)
  - Fluoride
- MSD (Lab ID: 4301592)
  - Fluoride

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_C
Pace Project No.: 92713247

Sample: 021324NMW34 **Lab ID: 92713247001** Collected: 02/13/24 15:40 Received: 02/14/24 10:18 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	**0.31**	ug/L	0.050	0.050	2		02/14/24 18:01	18540-29-9	H1,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	02/15/24 13:40	02/22/24 13:50	7440-36-0	
Arsenic	ND	ug/L	10.0	2.5	1	02/15/24 13:40	02/22/24 13:50	7440-38-2	
Barium	**40.8**	ug/L	5.0	0.79	1	02/15/24 13:40	02/22/24 13:50	7440-39-3	
Beryllium	ND	ug/L	1.0	0.16	1	02/15/24 13:40	02/22/24 13:50	7440-41-7	
Boron	**1400**	ug/L	50.0	4.0	1	02/15/24 13:40	02/22/24 13:50	7440-42-8	
Cadmium	ND	ug/L	1.0	0.29	1	02/15/24 13:40	02/22/24 13:50	7440-43-9	
Calcium	**35300**	ug/L	100	14.7	1	02/15/24 13:40	02/22/24 13:50	7440-70-2	
Chromium	ND	ug/L	5.0	0.63	1	02/15/24 13:40	02/22/24 13:50	7440-47-3	
Copper	ND	ug/L	5.0	0.62	1	02/15/24 13:40	02/22/24 13:50	7440-50-8	
Molybdenum	ND	ug/L	5.0	2.6	1	02/15/24 13:40	02/22/24 13:50	7439-98-7	
Nickel	**0.90J**	ug/L	5.0	0.88	1	02/15/24 13:40	02/22/24 13:50	7440-02-0	
Selenium	ND	ug/L	10.0	4.1	1	02/15/24 13:40	02/22/24 13:50	7782-49-2	
Silver	ND	ug/L	5.0	0.49	1	02/15/24 13:40	02/22/24 13:50	7440-22-4	
Hardness, Total(SM 2340B)	**143000**	ug/L	662	36.8	1	02/15/24 13:40	02/22/24 13:50		
Vanadium	ND	ug/L	5.0	1.6	1	02/15/24 13:40	02/22/24 13:50	7440-62-2	
Zinc	ND	ug/L	10.0	3.0	1	02/15/24 13:40	02/22/24 13:50	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	02/15/24 13:55	02/16/24 00:32	7440-48-4	
Iron	ND	ug/L	50.0	20.9	1	02/15/24 13:55	02/16/24 00:32	7439-89-6	
Lead	ND	ug/L	1.0	0.077	1	02/15/24 13:55	02/16/24 00:32	7439-92-1	
Lithium	**7.1**	ug/L	2.5	0.50	1	02/15/24 13:55	02/16/24 00:32	7439-93-2	
Manganese	**4.3**	ug/L	2.0	1.0	1	02/15/24 13:55	02/16/24 00:32	7439-96-5	
Thallium	ND	ug/L	0.20	0.050	1	02/15/24 13:55	02/16/24 00:32	7440-28-0	
Tin	ND	ug/L	1.0	0.43	1	02/15/24 13:55	02/16/24 00:32	7440-31-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Asheville								
Mercury	**0.15J**	ug/L	0.20	0.12	1	02/17/24 15:38	02/20/24 09:57	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**254**	mg/L	10.0	10.0	1		02/20/24 15:34		
350.1 Ammonia	Analytical Method: EPA 350.1 Rev 2.0 1993 Pace Analytical Services - Asheville								
Nitrogen, Ammonia	**0.045J**	mg/L	0.10	0.031	1		03/06/24 23:59	7664-41-7	

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ANALYTICAL RESULTS

Project: Bremo_1SA2024_CCR&VSWMR_P_C
Pace Project No.: 92713247

Sample: 021324NMW34 **Lab ID: 92713247001** Collected: 02/13/24 15:40 Received: 02/14/24 10:18 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	**12.7**	mg/L	1.0	0.60	1		02/15/24 04:15	16887-00-6	
Fluoride	**0.052J**	mg/L	0.10	0.050	1		02/15/24 04:15	16984-48-8	M1
Nitrate as N	ND	mg/L	0.10	0.060	1		02/15/24 04:15	14797-55-8	
Sulfate	**37.4**	mg/L	1.0	0.50	1		02/15/24 04:15	14808-79-8	

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ANALYTICAL RESULTS

Project: Bremo_1SA2024_CCR&VSWMR_P_C
Pace Project No.: 92713247

Sample: 021424NMW24 **Lab ID: 92713247002** Collected: 02/14/24 12:40 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 12:03	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	02/20/24 19:17	7440-36-0	
Arsenic	ND	ug/L	10.0	2.5	1	02/16/24 12:55	02/20/24 19:17	7440-38-2	
Barium	**69.4**	ug/L	5.0	0.79	1	02/16/24 12:55	02/20/24 19:17	7440-39-3	
Beryllium	ND	ug/L	1.0	0.16	1	02/16/24 12:55	02/20/24 19:17	7440-41-7	
Boron	**195**	ug/L	50.0	4.0	1	02/16/24 12:55	02/20/24 19:17	7440-42-8	
Cadmium	ND	ug/L	1.0	0.29	1	02/16/24 12:55	02/21/24 11:58	7440-43-9	
Calcium	**62400**	ug/L	100	14.7	1	02/16/24 12:55	02/21/24 11:58	7440-70-2	
Chromium	ND	ug/L	5.0	0.63	1	02/16/24 12:55	02/21/24 11:58	7440-47-3	
Copper	**10.1**	ug/L	5.0	0.62	1	02/16/24 12:55	02/21/24 11:58	7440-50-8	B
Molybdenum	**4.3J**	ug/L	5.0	2.6	1	02/16/24 12:55	02/21/24 11:58	7439-98-7	
Nickel	**1.3J**	ug/L	5.0	0.88	1	02/16/24 12:55	02/21/24 11:58	7440-02-0	
Selenium	ND	ug/L	10.0	4.1	1	02/16/24 12:55	02/20/24 19:17	7782-49-2	
Silver	ND	ug/L	5.0	0.49	1	02/16/24 12:55	02/21/24 11:58	7440-22-4	
Hardness, Total(SM 2340B)	**200000**	ug/L	662	36.8	1	02/16/24 12:55	02/21/24 11:58		
Vanadium	ND	ug/L	5.0	1.6	1	02/16/24 12:55	02/21/24 11:58	7440-62-2	
Zinc	**12.0**	ug/L	10.0	3.0	1	02/16/24 12:55	02/21/24 11:58	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Cobalt	**60.4**	ug/L	1.0	0.050	1	02/16/24 16:20	02/20/24 05:38	7440-48-4	
Iron	**5980**	ug/L	250	105	5	02/16/24 16:20	02/20/24 15:17	7439-89-6	L2
Lead	**0.13J**	ug/L	1.0	0.077	1	02/16/24 16:20	02/20/24 05:38	7439-92-1	
Lithium	**2.7**	ug/L	2.5	0.50	1	02/16/24 16:20	02/20/24 05:38	7439-93-2	
Manganese	**3130**	ug/L	40.0	20.4	20	02/16/24 16:20	02/20/24 15:22	7439-96-5	
Thallium	ND	ug/L	0.20	0.050	1	02/16/24 16:20	02/20/24 05:38	7440-28-0	
Tin	ND	ug/L	1.0	0.43	1	02/16/24 16:20	02/20/24 05:38	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	02/17/24 15:38	02/20/24 10:20	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**305**	mg/L	10.0	10.0	1		02/20/24 16:57		
350.1 Ammonia	Analytical Method: EPA 350.1 Rev 2.0 1993 Pace Analytical Services - Asheville								
Nitrogen, Ammonia	**0.53**	mg/L	0.10	0.031	1		03/07/24 00:11	7664-41-7	

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ANALYTICAL RESULTS

Project: Bremo_1SA2024_CCR&VSWMR_P_C
Pace Project No.: 92713247

Sample: 021424NMW24 **Lab ID: 92713247002** Collected: 02/14/24 12:40 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	**16.8**	mg/L	1.0	0.60	1		02/16/24 00:03	16887-00-6	
Fluoride	**0.061J**	mg/L	0.10	0.050	1		02/16/24 00:03	16984-48-8	
Nitrate as N	ND	mg/L	0.10	0.060	1		02/16/24 00:03	14797-55-8	
Sulfate	**36.7**	mg/L	1.0	0.50	1		02/16/24 00:03	14808-79-8	

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ANALYTICAL RESULTS

Project: Bremo_1SA2024_CCR&VSWMR_P_C
Pace Project No.: 92713247

Sample: 021424NMW27D **Lab ID: 92713247003** Collected: 02/14/24 13:40 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	**0.025**	ug/L	0.025	0.025	1		02/15/24 12:39	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 12:49	7440-36-0	
Arsenic	ND	ug/L	10.0	2.5	1	02/16/24 12:55	02/20/24 20:14	7440-38-2	
Barium	**22.4**	ug/L	5.0	0.79	1	02/16/24 12:55	02/21/24 12:49	7440-39-3	
Beryllium	ND	ug/L	1.0	0.16	1	02/16/24 12:55	02/20/24 20:14	7440-41-7	
Boron	**1180**	ug/L	50.0	4.0	1	02/16/24 12:55	02/20/24 20:14	7440-42-8	
Cadmium	ND	ug/L	1.0	0.29	1	02/16/24 12:55	02/21/24 12:49	7440-43-9	
Calcium	**67100**	ug/L	100	14.7	1	02/16/24 12:55	02/21/24 12:49	7440-70-2	
Chromium	ND	ug/L	5.0	0.63	1	02/16/24 12:55	02/21/24 12:49	7440-47-3	
Copper	**1.2J**	ug/L	5.0	0.62	1	02/16/24 12:55	02/21/24 12:49	7440-50-8	B
Molybdenum	ND	ug/L	5.0	2.6	1	02/16/24 12:55	02/21/24 12:49	7439-98-7	
Nickel	**1.8J**	ug/L	5.0	0.88	1	02/16/24 12:55	02/21/24 12:49	7440-02-0	
Selenium	ND	ug/L	10.0	4.1	1	02/16/24 12:55	02/20/24 20:14	7782-49-2	
Silver	**1.4J**	ug/L	5.0	0.49	1	02/16/24 12:55	02/21/24 12:49	7440-22-4	
Hardness, Total(SM 2340B)	**292000**	ug/L	662	36.8	1	02/16/24 12:55	02/21/24 12:49		
Vanadium	ND	ug/L	5.0	1.6	1	02/16/24 12:55	02/21/24 12:49	7440-62-2	
Zinc	**8.3J**	ug/L	10.0	3.0	1	02/16/24 12:55	02/21/24 12:49	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Cobalt	**0.45J**	ug/L	1.0	0.050	1	02/16/24 16:20	02/20/24 05:42	7440-48-4	
Iron	**462**	ug/L	50.0	20.9	1	02/16/24 16:20	02/20/24 05:42	7439-89-6	L2
Lead	ND	ug/L	1.0	0.077	1	02/16/24 16:20	02/20/24 05:42	7439-92-1	
Lithium	**26.5**	ug/L	2.5	0.50	1	02/16/24 16:20	02/20/24 05:42	7439-93-2	
Manganese	**212**	ug/L	4.0	2.0	2	02/16/24 16:20	02/20/24 15:27	7439-96-5	
Thallium	ND	ug/L	0.20	0.050	1	02/16/24 16:20	02/20/24 05:42	7440-28-0	
Tin	ND	ug/L	1.0	0.43	1	02/16/24 16:20	02/20/24 05:42	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	02/17/24 15:38	02/20/24 10:22	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**666**	mg/L	50.0	50.0	1		02/17/24 01:33		
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 00:12	7664-41-7	

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ANALYTICAL RESULTS

Project: Bremo_1SA2024_CCR&VSWMR_P_C
Pace Project No.: 92713247

Sample: 021424NMW27D **Lab ID: 92713247003** Collected: 02/14/24 13:40 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	**12.3**	mg/L	1.0	0.60	1		02/16/24 01:04	16887-00-6	
Fluoride	**0.13**	mg/L	0.10	0.050	1		02/16/24 01:04	16984-48-8	
Nitrate as N	ND	mg/L	0.10	0.060	1		02/16/24 01:04	14797-55-8	
Sulfate	**191**	mg/L	4.0	2.0	4		02/16/24 12:03	14808-79-8	

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ANALYTICAL RESULTS

Project: Bremo_1SA2024_CCR&VSWMR_P_C
Pace Project No.: 92713247

Sample: 021424NMW33 **Lab ID: 92713247004** Collected: 02/14/24 12:05 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	**0.060**	ug/L	0.025	0.025	1		02/15/24 11:00	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	02/20/24 19:20	7440-36-0	
Arsenic	ND	ug/L	10.0	2.5	1	02/16/24 12:55	02/20/24 19:20	7440-38-2	
Barium	**15.7**	ug/L	5.0	0.79	1	02/16/24 12:55	02/20/24 19:20	7440-39-3	
Beryllium	ND	ug/L	1.0	0.16	1	02/16/24 12:55	02/20/24 19:20	7440-41-7	
Boron	**269**	ug/L	50.0	4.0	1	02/16/24 12:55	02/20/24 19:20	7440-42-8	
Cadmium	ND	ug/L	1.0	0.29	1	02/16/24 12:55	02/21/24 12:01	7440-43-9	
Calcium	**75000**	ug/L	100	14.7	1	02/16/24 12:55	02/21/24 12:01	7440-70-2	
Chromium	ND	ug/L	5.0	0.63	1	02/16/24 12:55	02/21/24 12:01	7440-47-3	
Copper	**3.0J**	ug/L	5.0	0.62	1	02/16/24 12:55	02/21/24 12:01	7440-50-8	B
Molybdenum	ND	ug/L	5.0	2.6	1	02/16/24 12:55	02/20/24 19:20	7439-98-7	
Nickel	**1.3J**	ug/L	5.0	0.88	1	02/16/24 12:55	02/20/24 19:20	7440-02-0	
Selenium	ND	ug/L	10.0	4.1	1	02/16/24 12:55	02/20/24 19:20	7782-49-2	
Silver	ND	ug/L	5.0	0.49	1	02/16/24 12:55	02/21/24 12:01	7440-22-4	
Hardness, Total(SM 2340B)	**250000**	ug/L	662	36.8	1	02/16/24 12:55	02/21/24 12:01		
Vanadium	**2.0J**	ug/L	5.0	1.6	1	02/16/24 12:55	02/21/24 12:01	7440-62-2	
Zinc	**17.4**	ug/L	10.0	3.0	1	02/16/24 12:55	02/20/24 19:20	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Cobalt	**0.074J**	ug/L	1.0	0.050	1	02/16/24 16:20	02/20/24 05:56	7440-48-4	
Iron	**85.7**	ug/L	50.0	20.9	1	02/16/24 16:20	02/20/24 05:56	7439-89-6	L2
Lead	**0.11J**	ug/L	1.0	0.077	1	02/16/24 16:20	02/20/24 05:56	7439-92-1	
Lithium	**3.5**	ug/L	2.5	0.50	1	02/16/24 16:20	02/20/24 05:56	7439-93-2	
Manganese	**17.6**	ug/L	2.0	1.0	1	02/16/24 16:20	02/20/24 05:56	7439-96-5	
Thallium	ND	ug/L	0.20	0.050	1	02/16/24 16:20	02/20/24 05:56	7440-28-0	
Tin	ND	ug/L	1.0	0.43	1	02/16/24 16:20	02/20/24 05:56	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 10:24	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**329**	mg/L	10.0	10.0	1		02/17/24 01:34		
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 00:14	7664-41-7	

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ANALYTICAL RESULTS

Project: Bremo_1SA2024_CCR&VSWMR_P_C
Pace Project No.: 92713247

Sample: 021424NMW33 **Lab ID: 92713247004** Collected: 02/14/24 12:05 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	**12.1**	mg/L	1.0	0.60	1		02/15/24 23:17	16887-00-6	
Fluoride	**0.079J**	mg/L	0.10	0.050	1		02/15/24 23:17	16984-48-8	
Nitrate as N	**0.14**	mg/L	0.10	0.060	1		02/15/24 23:17	14797-55-8	
Sulfate	**30.9**	mg/L	1.0	0.50	1		02/15/24 23:17	14808-79-8	

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ANALYTICAL RESULTS

Project: Bremo_1SA2024_CCR&VSWMR_P_C
Pace Project No.: 92713247

Sample: 021424NMW35 **Lab ID: 92713247005** Collected: 02/14/24 12:10 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	ND	ug/L	0.025	0.025	1		02/15/24 11:28	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	02/20/24 19:23	7440-36-0	
Arsenic	ND	ug/L	10.0	2.5	1	02/16/24 12:55	02/20/24 19:23	7440-38-2	
Barium	**77.2**	ug/L	5.0	0.79	1	02/16/24 12:55	02/20/24 19:23	7440-39-3	
Beryllium	ND	ug/L	1.0	0.16	1	02/16/24 12:55	02/20/24 19:23	7440-41-7	
Boron	**557**	ug/L	50.0	4.0	1	02/16/24 12:55	02/20/24 19:23	7440-42-8	
Cadmium	ND	ug/L	1.0	0.29	1	02/16/24 12:55	02/21/24 12:03	7440-43-9	
Calcium	**56200**	ug/L	100	14.7	1	02/16/24 12:55	02/21/24 12:03	7440-70-2	
Chromium	**1.3J**	ug/L	5.0	0.63	1	02/16/24 12:55	02/21/24 12:03	7440-47-3	
Copper	ND	ug/L	5.0	0.62	1	02/16/24 12:55	02/21/24 12:03	7440-50-8	
Molybdenum	ND	ug/L	5.0	2.6	1	02/16/24 12:55	02/20/24 19:23	7439-98-7	
Nickel	ND	ug/L	5.0	0.88	1	02/16/24 12:55	02/20/24 19:23	7440-02-0	
Selenium	ND	ug/L	10.0	4.1	1	02/16/24 12:55	02/20/24 19:23	7782-49-2	
Silver	ND	ug/L	5.0	0.49	1	02/16/24 12:55	02/21/24 12:03	7440-22-4	
Hardness, Total(SM 2340B)	**181000**	ug/L	662	36.8	1	02/16/24 12:55	02/21/24 12:03		
Vanadium	ND	ug/L	5.0	1.6	1	02/16/24 12:55	02/21/24 12:03	7440-62-2	
Zinc	ND	ug/L	10.0	3.0	1	02/16/24 12:55	02/20/24 19:23	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Cobalt	**0.45J**	ug/L	1.0	0.050	1	02/16/24 16:20	02/20/24 06:01	7440-48-4	
Iron	**1710**	ug/L	50.0	20.9	1	02/16/24 16:20	02/20/24 06:01	7439-89-6	L2
Lead	ND	ug/L	1.0	0.077	1	02/16/24 16:20	02/20/24 06:01	7439-92-1	
Lithium	**19.8**	ug/L	2.5	0.50	1	02/16/24 16:20	02/20/24 06:01	7439-93-2	
Manganese	**726**	ug/L	10.0	5.1	5	02/16/24 16:20	02/20/24 15:31	7439-96-5	
Thallium	ND	ug/L	0.20	0.050	1	02/16/24 16:20	02/20/24 06:01	7440-28-0	
Tin	ND	ug/L	1.0	0.43	1	02/16/24 16:20	02/20/24 06:01	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 10:26	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**285**	mg/L	10.0	10.0	1		02/20/24 16:58		
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 00:15	7664-41-7	

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ANALYTICAL RESULTS

Project: Bremo_1SA2024_CCR&VSWMR_P_C
Pace Project No.: 92713247

Sample: 021424NMW35 **Lab ID: 92713247005** Collected: 02/14/24 12:10 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	**10.1**	mg/L	1.0	0.60	1		02/15/24 23:32	16887-00-6	
Fluoride	**0.057J**	mg/L	0.10	0.050	1		02/15/24 23:32	16984-48-8	
Nitrate as N	ND	mg/L	0.10	0.060	1		02/15/24 23:32	14797-55-8	
Sulfate	**36.0**	mg/L	1.0	0.50	1		02/15/24 23:32	14808-79-8	

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ANALYTICAL RESULTS

Project: Bremo_1SA2024_CCR&VSWMR_P_C
Pace Project No.: 92713247

Sample: 021424NNPFDDUPLICATE **Lab ID: 92713247006** Collected: 02/14/24 12:20 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 11:46	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	02/20/24 19:25	7440-36-0	
Arsenic	ND	ug/L	10.0	2.5	1	02/16/24 12:55	02/20/24 19:25	7440-38-2	
Barium	**80.3**	ug/L	5.0	0.79	1	02/16/24 12:55	02/20/24 19:25	7440-39-3	
Beryllium	ND	ug/L	1.0	0.16	1	02/16/24 12:55	02/20/24 19:25	7440-41-7	
Boron	**580**	ug/L	50.0	4.0	1	02/16/24 12:55	02/20/24 19:25	7440-42-8	
Cadmium	ND	ug/L	1.0	0.29	1	02/16/24 12:55	02/21/24 12:06	7440-43-9	
Calcium	**57800**	ug/L	100	14.7	1	02/16/24 12:55	02/21/24 12:06	7440-70-2	
Chromium	**1.4J**	ug/L	5.0	0.63	1	02/16/24 12:55	02/21/24 12:06	7440-47-3	
Copper	ND	ug/L	5.0	0.62	1	02/16/24 12:55	02/21/24 12:06	7440-50-8	
Molybdenum	ND	ug/L	5.0	2.6	1	02/16/24 12:55	02/20/24 19:25	7439-98-7	
Nickel	ND	ug/L	5.0	0.88	1	02/16/24 12:55	02/20/24 19:25	7440-02-0	
Selenium	ND	ug/L	10.0	4.1	1	02/16/24 12:55	02/20/24 19:25	7782-49-2	
Silver	ND	ug/L	5.0	0.49	1	02/16/24 12:55	02/21/24 12:06	7440-22-4	
Hardness, Total(SM 2340B)	**187000**	ug/L	662	36.8	1	02/16/24 12:55	02/21/24 12:06		
Vanadium	ND	ug/L	5.0	1.6	1	02/16/24 12:55	02/21/24 12:06	7440-62-2	
Zinc	ND	ug/L	10.0	3.0	1	02/16/24 12:55	02/20/24 19:25	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Cobalt	**0.44J**	ug/L	1.0	0.050	1	02/16/24 16:20	02/20/24 06:05	7440-48-4	
Iron	**1550**	ug/L	50.0	20.9	1	02/16/24 16:20	02/20/24 06:05	7439-89-6	L2
Lead	ND	ug/L	1.0	0.077	1	02/16/24 16:20	02/20/24 06:05	7439-92-1	
Lithium	**18.8**	ug/L	2.5	0.50	1	02/16/24 16:20	02/20/24 06:05	7439-93-2	
Manganese	**705**	ug/L	10.0	5.1	5	02/16/24 16:20	02/20/24 15:36	7439-96-5	
Thallium	ND	ug/L	0.20	0.050	1	02/16/24 16:20	02/20/24 06:05	7440-28-0	
Tin	ND	ug/L	1.0	0.43	1	02/16/24 16:20	02/20/24 06:05	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 10:28	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**288**	mg/L	10.0	10.0	1		02/20/24 16:59		
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 00:17	7664-41-7	

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ANALYTICAL RESULTS

Project: Bremo_1SA2024_CCR&VSWMR_P_C
Pace Project No.: 92713247

Sample: 021424NNPFDDUPLICATE **Lab ID: 92713247006** Collected: 02/14/24 12:20 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	**10.1**	mg/L	1.0	0.60	1		02/15/24 23:48	16887-00-6	
Fluoride	**0.055J**	mg/L	0.10	0.050	1		02/15/24 23:48	16984-48-8	
Nitrate as N	ND	mg/L	0.10	0.060	1		02/15/24 23:48	14797-55-8	
Sulfate	**36.0**	mg/L	1.0	0.50	1		02/15/24 23:48	14808-79-8	

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QUALITY CONTROL DATA

Project: Bremo_1SA2024_CCR&VSWMR_P_C
Pace Project No.: 92713247

QC Batch: 832217
QC Batch Method: EPA 7199
Analysis Method: EPA 7199
Analysis Description: 7199 Chromium, Hexavalent
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92713247001

METHOD BLANK: 4300568 Matrix: Water
Associated Lab Samples: 92713247001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chromium, Hexavalent	ug/L	ND	0.025	0.025	02/14/24 21:57	

LABORATORY CONTROL SAMPLE: 4300569

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	ug/L	0.1	0.095	95	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4300570 4300571

Parameter	Units	92713247001 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	0.31	0.1	0.1	0.40	0.39	88	80	90-110	2	20	H1,M1

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QUALITY CONTROL DATA

Project: Bremo_1SA2024_CCR&VSWMR_P_C
Pace Project No.: 92713247

QC Batch: 832547
QC Batch Method: EPA 7199
Analysis Method: EPA 7199
Analysis Description: 7199 Chromium, Hexavalent
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92713247002, 92713247003, 92713247004, 92713247005, 92713247006

METHOD BLANK: 4302264 Matrix: Water
Associated Lab Samples: 92713247002, 92713247003, 92713247004, 92713247005, 92713247006

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_C
Pace Project No.: 92713247

QC Batch: 833175
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92713247001, 92713247002, 92713247003, 92713247004, 92713247005, 92713247006

METHOD BLANK: 4305621 Matrix: Water
Associated Lab Samples: 92713247001, 92713247002, 92713247003, 92713247004, 92713247005, 92713247006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	ug/L	ND	0.20	0.12	02/20/24 09:34	

LABORATORY CONTROL SAMPLE: 4305622

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: 4305623 4305624

Parameter	Units	92713247001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	0.15J	2.5	2.5	2.6	2.6	100	97	75-125	3	25	

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QUALITY CONTROL DATA

Project: Bremo_1SA2024_CCR&VSWMR_P_C
Pace Project No.: 92713247

QC Batch: 832572
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92713247001

METHOD BLANK: 4302448 Matrix: Water
Associated Lab Samples: 92713247001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	ug/L	ND	5.0	3.6	02/22/24 13:16	
Arsenic	ug/L	ND	10.0	2.5	02/22/24 13:16	
Barium	ug/L	ND	5.0	0.79	02/22/24 13:16	
Beryllium	ug/L	ND	1.0	0.16	02/22/24 13:16	
Boron	ug/L	ND	50.0	4.0	02/22/24 13:16	
Cadmium	ug/L	ND	1.0	0.29	02/22/24 13:16	
Calcium	ug/L	ND	100	14.7	02/22/24 13:16	
Chromium	ug/L	ND	5.0	0.63	02/22/24 13:16	
Copper	ug/L	ND	5.0	0.62	02/22/24 13:16	
Hardness, Total(SM 2340B)	ug/L	ND	662	36.8	02/22/24 13:16	
Molybdenum	ug/L	ND	5.0	2.6	02/22/24 13:16	
Nickel	ug/L	ND	5.0	0.88	02/22/24 13:16	
Selenium	ug/L	ND	10.0	4.1	02/22/24 13:16	
Silver	ug/L	ND	5.0	0.49	02/22/24 13:16	
Vanadium	ug/L	ND	5.0	1.6	02/22/24 13:16	
Zinc	ug/L	ND	10.0	3.0	02/22/24 13:16	

LABORATORY CONTROL SAMPLE: 4302449

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	500	524	105	80-120	
Arsenic	ug/L	500	518	104	80-120	
Barium	ug/L	500	537	107	80-120	
Beryllium	ug/L	500	516	103	80-120	
Boron	ug/L	500	515	103	80-120	
Cadmium	ug/L	500	508	102	80-120	
Calcium	ug/L	5000	5180	104	80-120	
Chromium	ug/L	500	510	102	80-120	
Copper	ug/L	500	517	103	80-120	
Hardness, Total(SM 2340B)	ug/L	33100	33300	101	80-120	
Molybdenum	ug/L	500	522	104	80-120	
Nickel	ug/L	500	509	102	80-120	
Selenium	ug/L	500	509	102	80-120	
Silver	ug/L	250	252	101	80-120	
Vanadium	ug/L	500	510	102	80-120	
Zinc	ug/L	500	515	103	80-120	

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QUALITY CONTROL DATA

Project: Bremo_1SA2024_CCR&VSWMR_P_C
Pace Project No.: 92713247

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4302450 4302451

Parameter	Units	92712989006 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	541	547	108	109	75-125	1	20	
Arsenic	ug/L	ND	500	500	534	538	107	108	75-125	1	20	
Barium	ug/L	13.0	500	500	557	552	109	108	75-125	1	20	
Beryllium	ug/L	ND	500	500	538	542	108	108	75-125	1	20	
Boron	ug/L	ND	500	500	537	540	107	108	75-125	1	20	
Cadmium	ug/L	ND	500	500	520	524	104	105	75-125	1	20	
Calcium	ug/L	2970	5000	5000	8470	8150	110	104	75-125	4	20	
Chromium	ug/L	ND	500	500	525	529	105	106	75-125	1	20	
Copper	ug/L	0.97J	500	500	519	524	104	105	75-125	1	20	
Hardness, Total(SM 2340B)	ug/L	15200	33100	33100	50400	49900	107	105	75-125	1	20	
Molybdenum	ug/L	ND	500	500	527	532	105	106	75-125	1	20	
Nickel	ug/L	ND	500	500	518	523	104	104	75-125	1	20	
Selenium	ug/L	ND	500	500	546	551	109	110	75-125	1	20	
Silver	ug/L	ND	250	250	259	261	103	104	75-125	1	20	
Vanadium	ug/L	ND	500	500	521	525	104	105	75-125	1	20	
Zinc	ug/L	4.0J	500	500	531	535	105	106	75-125	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4302452 4302453

Parameter	Units	92713247001 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	559	554	112	111	75-125	1	20	
Arsenic	ug/L	ND	500	500	547	544	109	109	75-125	1	20	
Barium	ug/L	40.8	500	500	572	576	106	107	75-125	1	20	
Beryllium	ug/L	ND	500	500	549	543	110	109	75-125	1	20	
Boron	ug/L	1400	500	500	2000	1990	121	118	75-125	1	20	
Cadmium	ug/L	ND	500	500	520	516	104	103	75-125	1	20	
Calcium	ug/L	35300	5000	5000	40900	41300	112	119	75-125	1	20	
Chromium	ug/L	ND	500	500	533	527	106	105	75-125	1	20	
Copper	ug/L	ND	500	500	536	533	107	107	75-125	1	20	
Hardness, Total(SM 2340B)	ug/L	143000	33100	33100	182000	183000	117	119	75-125	0	20	
Molybdenum	ug/L	ND	500	500	539	535	108	107	75-125	1	20	
Nickel	ug/L	0.90J	500	500	513	510	102	102	75-125	1	20	
Selenium	ug/L	ND	500	500	556	552	111	110	75-125	1	20	
Silver	ug/L	ND	250	250	268	265	107	106	75-125	1	20	
Vanadium	ug/L	ND	500	500	529	525	106	105	75-125	1	20	
Zinc	ug/L	ND	500	500	525	522	105	104	75-125	1	20	

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QUALITY CONTROL DATA

Project: Bremo_1SA2024_CCR&VSWMR_P_C
Pace Project No.: 92713247

QC Batch: 832927
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92713247002, 92713247003, 92713247004, 92713247005, 92713247006

METHOD BLANK: 4304175 Matrix: Water
Associated Lab Samples: 92713247002, 92713247003, 92713247004, 92713247005, 92713247006

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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QUALITY CONTROL DATA

Project: Bremo_1SA2024_CCR&VSWMR_P_C
Pace Project No.: 92713247

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_C
Pace Project No.: 92713247

QC Batch: 832575
QC Batch Method: EPA 3010A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92713247001

METHOD BLANK: 4302470 Matrix: Water
Associated Lab Samples: 92713247001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Cobalt	ug/L	ND	1.0	0.050	02/15/24 23:17	
Iron	ug/L	ND	50.0	20.9	02/15/24 23:17	
Lead	ug/L	ND	1.0	0.077	02/15/24 23:17	
Lithium	ug/L	ND	2.5	0.50	02/15/24 23:17	
Manganese	ug/L	ND	2.0	1.0	02/15/24 23:17	
Thallium	ug/L	ND	0.20	0.050	02/15/24 23:17	
Tin	ug/L	ND	1.0	0.43	02/15/24 23:17	

LABORATORY CONTROL SAMPLE: 4302471

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cobalt	ug/L	50	53.7	107	80-120	
Iron	ug/L	1250	1340	107	80-120	
Lead	ug/L	50	54.2	108	80-120	
Lithium	ug/L	50	53.7	107	80-120	
Manganese	ug/L	50	52.3	105	80-120	
Thallium	ug/L	25	26.2	105	80-120	
Tin	ug/L	50	52.4	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4302472 4302473

Parameter	Units	92712989006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cobalt	ug/L	1.1	50	50	53.4	55.6	105	109	75-125	4	20	
Iron	ug/L	149	1250	1250	1460	1520	105	110	75-125	4	20	
Lead	ug/L	ND	50	50	53.5	54.9	107	110	75-125	3	20	
Lithium	ug/L	ND	50	50	52.4	53.9	104	107	75-125	3	20	
Manganese	ug/L	37.3	50	50	85.3	88.6	96	103	75-125	4	20	
Thallium	ug/L	ND	25	25	26.0	26.6	104	106	75-125	2	20	
Tin	ug/L	ND	50	50	52.0	54.9	104	109	75-125	5	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4302474 4302475

Parameter	Units	92713247001 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	51.8	51.7	104	103	75-125	0	20	

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QUALITY CONTROL DATA

Project: Bremo_1SA2024_CCR&VSWMR_P_C
Pace Project No.: 92713247

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4302474 4302475

Parameter	Units	92713247001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Iron	ug/L	ND	1250	1250	1310	1310	104	104	75-125	0	20	
Lead	ug/L	ND	50	50	53.6	53.6	107	107	75-125	0	20	
Lithium	ug/L	7.1	50	50	58.5	58.7	103	103	75-125	0	20	
Manganese	ug/L	4.3	50	50	55.7	55.5	103	102	75-125	0	20	
Thallium	ug/L	ND	25	25	26.2	26.3	105	105	75-125	0	20	
Tin	ug/L	ND	50	50	52.8	52.8	106	105	75-125	0	20	

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QUALITY CONTROL DATA

Project: Bremo_1SA2024_CCR&VSWMR_P_C
Pace Project No.: 92713247

QC Batch: 833004
QC Batch Method: EPA 3010A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92713247002, 92713247003, 92713247004, 92713247005, 92713247006

METHOD BLANK: 4304627 Matrix: Water
Associated Lab Samples: 92713247002, 92713247003, 92713247004, 92713247005, 92713247006

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_C
Pace Project No.: 92713247

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: 92713247003, 92713247004

METHOD BLANK: 4305515 Matrix: Water
Associated Lab Samples: 92713247003, 92713247004

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_C
Pace Project No.: 92713247

QC Batch: 833515
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: 92713247001

METHOD BLANK: 4306953 Matrix: Water
Associated Lab Samples: 92713247001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	02/20/24 15:32	

LABORATORY CONTROL SAMPLE: 4306954

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	250	246	98	80-120	

SAMPLE DUPLICATE: 4306955

Parameter	Units	92713247001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	254	253	0	25	

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QUALITY CONTROL DATA

Project: Bremo_1SA2024_CCR&VSWMR_P_C
Pace Project No.: 92713247

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: 92713247002, 92713247005, 92713247006

METHOD BLANK: 4307410 Matrix: Water
Associated Lab Samples: 92713247002, 92713247005, 92713247006

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_C
Pace Project No.: 92713247

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: 92713247001, 92713247002, 92713247003, 92713247004, 92713247005, 92713247006

METHOD BLANK: 4323787 Matrix: Water
Associated Lab Samples: 92713247001, 92713247002, 92713247003, 92713247004, 92713247005, 92713247006

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_C
Pace Project No.: 92713247

QC Batch: 832355
QC Batch Method: EPA 9056A
Analysis Method: EPA 9056A
Analysis Description: 9056 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92713247001

METHOD BLANK: 4301587 Matrix: Water
Associated Lab Samples: 92713247001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	02/14/24 21:43	
Fluoride	mg/L	ND	0.10	0.050	02/14/24 21:43	
Nitrate as N	mg/L	ND	0.10	0.060	02/14/24 21:43	
Sulfate	mg/L	ND	1.0	0.50	02/14/24 21:43	

LABORATORY CONTROL SAMPLE: 4301588

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	48.9	98	90-110	
Fluoride	mg/L	2.5	2.5	101	90-110	
Nitrate as N	mg/L	2.5	2.4	94	90-110	
Sulfate	mg/L	50	49.6	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4301589 4301590

Parameter	Units	92712989006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	2.6	50	50	52.2	53.0	99	101	90-110	2	10	
Fluoride	mg/L	0.070J	2.5	2.5	3.6	3.3	140	129	90-110	8	10	M1
Nitrate as N	mg/L	0.10	2.5	2.5	2.5	2.5	96	97	90-110	2	10	
Sulfate	mg/L	3.1	50	50	58.3	56.6	110	107	90-110	3	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4301591 4301592

Parameter	Units	92713247001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	12.7	50	50	62.0	63.4	99	101	90-110	2	10	
Fluoride	mg/L	0.052J	2.5	2.5	2.9	3.0	113	116	90-110	3	10	M1
Nitrate as N	mg/L	ND	2.5	2.5	2.4	2.4	95	98	90-110	3	10	
Sulfate	mg/L	37.4	50	50	87.6	88.8	100	103	90-110	1	10	

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QUALITY CONTROL DATA

Project: Bremo_1SA2024_CCR&VSWMR_P_C
Pace Project No.: 92713247

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: 92713247002, 92713247003, 92713247004, 92713247005, 92713247006

METHOD BLANK: 4302020 Matrix: Water
Associated Lab Samples: 92713247002, 92713247003, 92713247004, 92713247005, 92713247006

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	

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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without the written consent of Pace Analytical Services, LLC.

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

QUALIFIERS

Project: Bremo_1SA2024_CCR&VSWMR_P_C
Pace Project No.: 92713247

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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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_C
Pace Project No.: 92713247

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92713247001	**021324NMW34**	EPA 7199	832217		
92713247002	**021424NMW24**	EPA 7199	832547		
92713247003	**021424NMW27D**	EPA 7199	832547		
92713247004	**021424NMW33**	EPA 7199	832547		
92713247005	**021424NMW35**	EPA 7199	832547		
92713247006	**021424NNPFDDUPLICATE**	EPA 7199	832547		
92713247001	**021324NMW34**	EPA 3010A	832572	EPA 6010D	832725
92713247002	**021424NMW24**	EPA 3010A	832927	EPA 6010D	833059
92713247003	**021424NMW27D**	EPA 3010A	832927	EPA 6010D	833059
92713247004	**021424NMW33**	EPA 3010A	832927	EPA 6010D	833059
92713247005	**021424NMW35**	EPA 3010A	832927	EPA 6010D	833059
92713247006	**021424NNPFDDUPLICATE**	EPA 3010A	832927	EPA 6010D	833059
92713247001	**021324NMW34**	EPA 3010A	832575	EPA 6020B	832736
92713247002	**021424NMW24**	EPA 3010A	833004	EPA 6020B	833104
92713247003	**021424NMW27D**	EPA 3010A	833004	EPA 6020B	833104
92713247004	**021424NMW33**	EPA 3010A	833004	EPA 6020B	833104
92713247005	**021424NMW35**	EPA 3010A	833004	EPA 6020B	833104
92713247006	**021424NNPFDDUPLICATE**	EPA 3010A	833004	EPA 6020B	833104
92713247001	**021324NMW34**	EPA 7470A	833175	EPA 7470A	833216
92713247002	**021424NMW24**	EPA 7470A	833175	EPA 7470A	833216
92713247003	**021424NMW27D**	EPA 7470A	833175	EPA 7470A	833216
92713247004	**021424NMW33**	EPA 7470A	833175	EPA 7470A	833216
92713247005	**021424NMW35**	EPA 7470A	833175	EPA 7470A	833216
92713247006	**021424NNPFDDUPLICATE**	EPA 7470A	833175	EPA 7470A	833216
92713247001	**021324NMW34**	SM 2540C-2015	833515		
92713247002	**021424NMW24**	SM 2540C-2015	833597		
92713247003	**021424NMW27D**	SM 2540C-2015	833124		
92713247004	**021424NMW33**	SM 2540C-2015	833124		
92713247005	**021424NMW35**	SM 2540C-2015	833597		
92713247006	**021424NNPFDDUPLICATE**	SM 2540C-2015	833597		
92713247001	**021324NMW34**	EPA 350.1 Rev 2.0 1993	837078		
92713247002	**021424NMW24**	EPA 350.1 Rev 2.0 1993	837078		
92713247003	**021424NMW27D**	EPA 350.1 Rev 2.0 1993	837078		
92713247004	**021424NMW33**	EPA 350.1 Rev 2.0 1993	837078		
92713247005	**021424NMW35**	EPA 350.1 Rev 2.0 1993	837078		
92713247006	**021424NNPFDDUPLICATE**	EPA 350.1 Rev 2.0 1993	837078		
92713247001	**021324NMW34**	EPA 9056A	832355		
92713247002	**021424NMW24**	EPA 9056A	832455		
92713247003	**021424NMW27D**	EPA 9056A	832455		
92713247004	**021424NMW33**	EPA 9056A	832455		
92713247005	**021424NMW35**	EPA 9056A	832455		
92713247006	**021424NNPFDDUPLICATE**	EPA 9056A	832455		

REPORT OF LABORATORY ANALYSIS

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

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

Sample Condition Upon Receipt

Client Name: Dominion Energy

Project # WO# : 92713247

92713247

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: GCG 2/14/24

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☑ IR Gun ID: 42Temp Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp (°C): 1.3 Correction Factor: Add / Subtract (°C) -0.1

Corrected Cooler Temp (°C): 1.2

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:	Temp:
Time:	put in cooler
Time:	Temp:

CLIENT NOTIFICATION/RESOLUTION

Person Contacted: Date/Time:

Project Manager SCURF Review: Date:

Project Manager SRF Review: Date:

WO#: 92713247

PM: AMB Due Date: 02/28/24

CLIENT: 92-DomEnergy

*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

Project #

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

***Check all unpreserved Nitrates for chlorine

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)	BDIN	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		3	3		3	3															3				6				
2																													
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4																													
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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.

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_C	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/Fl/SO4/NO3	Radium 226	Radium 228 & Total Radium				Sample Comment
~~02__24NMW24~~ MK	WT									X	X	X	X	X	X	X				-MS/MSD taken
~~02__24NMW27D~~ MK	WT									X	X	X	X	X	X	X				from MW-34
~~02__24NMW33~~ MK	WT									X	X	X	X	X	X	X				-All samples
02 13 24NMW34	WT	G			2/13/24	1540	21			X	X	X	X	X	X	X				preserved on ice
~~02__24NMW35~~ MK	WT									X	X	X	X	X	X	X				
~~02__24NMPFDDUPLICATE~~ MK	WT									X	X	X	X	X	X	X				
~~02__24____MS~~ MK	WT									X	X	X	X	X	X	X				
~~02__24____MSD~~ MK	WT									X	X	X	X	X	X	X				

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 3059940

Preservation non-conformance identified for sample

Additional Instructions from Pace®:

Collected By: (Printed Name) Z. 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) TH Kay / WSP	Date/Time: 2/13/24 1900	Received by/Company: (Signature) GMN Pace HM	Date/Time: 2/14/24 1018	Tracking Number:	
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 #

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
021324NMW34	GCG	9.69	9.37	2/14/24 1157	14 Drops Acid	224809
021324NNPMS	GCG	9.72	9.40	2/14/24 1200	16 Drops Acid	224809
021324NNPMSD	GCG	9.65	9.35	2/14/24 1152	12 Drops Acid	224809

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# : 92713247

92713247

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

Carrier Tracking Number: _____

Custody Seal Present? ☑ Yes ☐ No Seals Intact? ☑ Yes ☐ No Date/Initials Person Examining Contents: ABE 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): 0.2, 8.0, 6.3 Correction Factor: Add / Subtract (°C) -0.1

Corrected Cooler Temp (°C): 0.2, 7.0, 5.2

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: 1009	Temp: 0.2, 8.0, 6.3
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#: 92713247

PM: AMB Due Date: 02/28/24

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)	SPST-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	1			
2		1	1		1	1																			2	1			
3		1	1		1	1																			2	1			
4																													
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_C	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:

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 3059940

* 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
0214-24NMW24	WT	G			2/14/24	1240	7			X	X	X	X	X	X	X	-All samples
0214-24NMW27D	WT	G			2/14/24	1340	7			X	X	X	X	X	X	X	preserved on ice
0214-24NMW33	WT	G			2/14/24	1205	7			X	X	X	X	X	X	X	
~~02-24NMW34-MK~~	WT									X	X	X	X	X	X	X	
0214-24NMW35	WT	G			2/14/24	1210	7			X	X	X	X	X	X	X	
0214-24NNPFDDUPLICATE	WT	G			2/14/24	1220	7			X	X	X	X	X	X	X	
~~02-24-MS-MK~~	WT									X	X	X	X	X	X	X	
~~02-24-MSD-MK~~	WT									X	X	X	X	X	X	X	

Additional Instructions from Pace®:

Collected By: (Printed Name) M. Knez, J. Davis / Z. Mondshine

Signature: M. Knez / Jason Davis / Zach 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) M. Knez / Zach Mondshine WSP	Date/Time: 2/14/24 @ 1900	Received by/Company: (Signature) Cam Pace HH	Date/Time: 2/15/24 1010	Tracking Number:
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/

ENV-FRM-CORQ-0019_v02_110123 ©

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ANALYTICAL REPORT

March 13, 2024

Pace Analytical - Huntersville, NC

Sample Delivery Group:	L1706881
Samples Received:	02/17/2024
Project Number:	92713247
Description:	Bremo_1SA2024_CCR&VSWMR_p_C
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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021324NMW34 L1706881-01 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/13/24 15:40	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	02/29/24 12:47	ASN	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	WG2232398	1	02/23/24 16:36	03/06/24 21:23	DDD	Mt. Juliet, TN

021424NMW24 L1706881-02 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/14/24 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 14:17	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	WG2232398	1	02/23/24 16:36	03/06/24 21:23	SNR	Mt. Juliet, TN

021424NMW27D L1706881-03 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/14/24 13:40	02/17/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 903.0/9315	WG2231511	1	02/22/24 15:44	03/02/24 06:21	ASN	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	WG2231511	1	02/22/24 15:44	03/06/24 21:23	DDD	Mt. Juliet, TN

021424NMW33 L1706881-04 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/14/24 12:05	02/17/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 903.0/9315	WG2231511	1	02/22/24 15:44	03/02/24 06:21	ASN	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	WG2231511	1	02/22/24 15:44	03/06/24 21:23	DDD	Mt. Juliet, TN

021424NMW35 L1706881-05 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/14/24 12:10	02/17/24 09:00

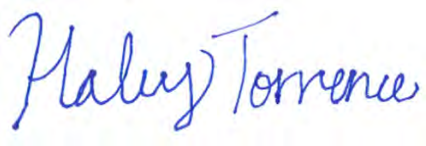
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 903.0/9315	WG2231511	1	02/22/24 15:44	03/02/24 07:22	ASN	Mt. Juliet, TN
Radiochemistry by Method 904/9320	WG2236199	1	02/28/24 18:35	03/06/24 21:23	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2231511	1	02/22/24 15:44	03/06/24 21:23	DDD	Mt. Juliet, TN

021424NNPFDDUPLICATE L1706881-06 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/14/24 12:20	02/17/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 903.0/9315	WG2231511	1	02/22/24 15:44	03/02/24 07:22	ASN	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	WG2231511	1	02/22/24 15:44	03/06/24 21:23	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	0.171	J	0.178		0.207		02/29/2024 12:47	WG2232398
(T) Barium	*102*					*30.0-143*	*02/29/2024 12:47*	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	-0.521	U	0.406	1.83	0.728	0.378	03/06/2024 21:23	WG2236199
(T) Barium	*128*					*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 pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.171	U	0.443	0.757	03/06/2024 21:23	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	0.858		0.343		0.286		03/01/2024 14:17	WG2232398
(T) Barium	*101*					*30.0-143*	*03/01/2024 14:17*	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	1.37		0.251	0.761	0.401	0.211	03/06/2024 21:23	WG2236199
(T) Barium	*129*					*30.0-143*	*03/06/2024 21:23*	WG2236199
(T) Yttrium	*95.7*					*30.0-136*	*03/06/2024 21:23*	WG2236199

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	2.23		0.425	0.493	03/06/2024 21:23	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	0.169	J	0.183		0.274		03/02/2024 06:21	WG2231511
(T) Barium	*95.3*					*30.0-143*	*03/02/2024 06:21*	WG2231511

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	0.715		0.259	1.08	0.438	0.230	03/06/2024 21:23	WG2236199
(T) Barium	*113*					*30.0-143*	*03/06/2024 21:23*	WG2236199
(T) Yttrium	*96.4*					*30.0-136*	*03/06/2024 21:23*	WG2236199

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.884		0.317	0.517	03/06/2024 21:23	WG2231511

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	0.346		0.217		0.257		03/02/2024 06:21	WG2231511
(T) Barium	*103*					*30.0-143*	*03/02/2024 06:21*	WG2231511

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	0.383	J	0.266	1.52	0.460	0.241	03/06/2024 21:23	WG2236199
(T) Barium	*132*					*30.0-143*	*03/06/2024 21:23*	WG2236199
(T) Yttrium	*109*					*30.0-136*	*03/06/2024 21:23*	WG2236199

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.729		0.343	0.527	03/06/2024 21:23	WG2231511

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	1.20		0.338		0.200		03/02/2024 07:22	WG2231511
(T) Barium	*101*					*30.0-143*	*03/02/2024 07:22*	WG2231511

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	1.18		0.275	0.854	0.453	0.237	03/06/2024 21:23	WG2236199
(T) Barium	*128*					*30.0-143*	*03/06/2024 21:23*	WG2236199
(T) Yttrium	*97.8*					*30.0-136*	*03/06/2024 21:23*	WG2236199

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	2.38		0.436	0.495	03/06/2024 21:23	WG2231511

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	1.10		0.328		0.203		03/02/2024 07:22	WG2231511
(T) Barium	*101*					*30.0-143*	*03/02/2024 07:22*	WG2231511

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	0.927		0.253	0.929	0.420	0.221	03/06/2024 21:23	WG2236199
(T) Barium	*137*					*30.0-143*	*03/06/2024 21:23*	WG2236199
(T) Yttrium	*110*					*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	2.03		0.414	0.466	03/06/2024 21:23	WG2231511

Method Blank (MB)

(MB) R4042859-1 03/02/24 02:20

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-226	0.209		0.107	0.124	
(T) Barium	*103*		*103*		

L1706881-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1706881-06 03/02/24 07:22 • (DUP) R4042859-5 03/02/24 03:21

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	1.10	0.328	0.203		1.67	0.575	0.343		41.2	0.861		20	3
(T) Barium	*101*				*104*	*104*							

Laboratory Control Sample (LCS)

(LCS) R4042859-2 03/02/24 02:20

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-226	5.00	5.90	118	80.0-120	
(T) Barium			*103*		

L1705781-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705781-01 03/02/24 04:21 • (MS) R4042859-3 03/02/24 02:20 • (MSD) R4042859-4 03/02/24 02:20

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	0.877	21.5	22.0	103	106	1	75.0-125			2.58		20
(T) Barium		*100*			*92.0*	*99.8*							

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*							

QUALITY CONTROL SUMMARY

L1706881-01,02,03,04,05,06

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*							

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: 92713247 Workorder Name: Bremo_1SA2024_CCR&VSWMR_P_C Owner Received Date: 2/14/2024 Results Requested By: 2/28/2024

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	Ra226 903.0	Ra228 904.0/Combined Ra	LAB USE ONLY
1	021324NMW34	RQS	2/13/2024 15:40	92713247001	Water	6	X	X	-01
2	021424NMW24	PS	2/14/2024 12:40	92713247002	Water	2	X	X	-02
3	021424NMW27D	PS	2/14/2024 13:40	92713247003	Water	2	X	X	-03
4	021424NMW33	PS	2/14/2024 12:05	92713247004	Water	2	X	X	-04
5	021424NMW35	PS	2/14/2024 12:10	92713247005	Water	2	X	X	-05
6	021424NNPFDDUPLICATE	PS	2/14/2024 12:20	92713247006	Water	2	X	X	-06

A235

U706881

Transfers	Released By	Date/Time	Received By	Date/Time
1	A Pace HLC	2/16/24 1700	M. Jarrell	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.

2-5TU=25 TUAB

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		

L702688

INTER_LABORATORY WORK ORDER # 92713247
(To be completed by sending lab)

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

Sending Project No:	92713247
Receiving Project No:	
Check Box for Consolidated Invoice:	☐
Date Prepared:	02/16/24
REQUESTED COMPLETION DATE:	**2/28/2024**

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	6	SI-38RAD	SUB PASI RAD
Ra228 904.0/Combined Ra	BP1N		HNO3	6	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_D
Pace Project No.: 92713248

Dear Kelly Hicks:

Enclosed are the analytical results for sample(s) received by the laboratory between February 14, 2024 and 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_D
Pace Project No.: 92713248

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_D
Pace Project No.: 92713248

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92713248001	**021324NMW25S**	Water	02/13/24 13:20	02/14/24 10:18
92713248002	**021324NMW25D**	Water	02/13/24 14:10	02/14/24 10:18
92713248003	**021324NMW26S**	Water	02/13/24 15:35	02/14/24 10:18
92713248004	**021324NMW26D**	Water	02/13/24 14:55	02/14/24 10:18
92713248005	**021324NMW27S**	Water	02/13/24 14:50	02/14/24 10:18
92713248006	**021424NMW28**	Water	02/14/24 14:05	02/15/24 10:10

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SAMPLE ANALYTE COUNT

Project: Bremo_1SA2024_CCR&VSWMR_P_D
Pace Project No.: 92713248

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92713248001	**021324NMW25S**	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	JAY	1	PASI-A
		EPA 350.1 Rev 2.0 1993	NCF	1	PASI-A
		EPA 9056A	CDC	4	PASI-A
92713248002	**021324NMW25D**	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	JAY	1	PASI-A
		EPA 350.1 Rev 2.0 1993	NCF	1	PASI-A
		EPA 9056A	CDC	4	PASI-A
92713248003	**021324NMW26S**	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	JAY	1	PASI-A
		EPA 350.1 Rev 2.0 1993	NCF	1	PASI-A
		EPA 9056A	CDC	4	PASI-A
92713248004	**021324NMW26D**	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	JAY	1	PASI-A
		EPA 350.1 Rev 2.0 1993	NCF	1	PASI-A
		EPA 9056A	CDC	4	PASI-A
92713248005	**021324NMW27S**	EPA 7199	IRC	1	PASI-C
		EPA 6010D	DBB1, SBW	16	PASI-A
		EPA 6020B	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	CDC	4	PASI-A
92713248006	**021424NMW28**	EPA 7199	ICO	1	PASI-C
		EPA 6010D	DBB1	16	PASI-A

REPORT OF LABORATORY ANALYSIS

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(704)875-9092

SAMPLE ANALYTE COUNT

Project: Bremo_1SA2024_CCR&VSWMR_P_D
Pace Project No.: 92713248

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 6020B	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

REPORT OF LABORATORY ANALYSIS

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Huntersville, NC 28078
(704)875-9092

SUMMARY OF DETECTION

Project: Bremo_1SA2024_CCR&VSWMR_P_D
Pace Project No.: 92713248

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92713248001	**021324NMW25S**					
EPA 7199	Chromium, Hexavalent	0.032	ug/L	0.025	02/14/24 12:07	
EPA 6010D	Barium	18.1	ug/L	5.0	02/22/24 14:04	
EPA 6010D	Boron	19.0J	ug/L	50.0	02/22/24 14:04	
EPA 6010D	Calcium	39800	ug/L	100	02/22/24 14:04	
EPA 6010D	Copper	1.7J	ug/L	5.0	02/22/24 14:04	
EPA 6010D	Nickel	2.0J	ug/L	5.0	02/22/24 14:04	
EPA 6010D	Silver	4.2J	ug/L	5.0	02/22/24 14:04	
EPA 6010D	Hardness, Total(SM 2340B)	142000	ug/L	662	02/22/24 14:04	
EPA 6010D	Zinc	4.9J	ug/L	10.0	02/22/24 14:04	
EPA 6020B	Cobalt	4.0	ug/L	1.0	02/16/24 01:07	
EPA 6020B	Iron	1120	ug/L	50.0	02/16/24 01:07	
EPA 6020B	Lead	0.18J	ug/L	1.0	02/16/24 01:07	
EPA 6020B	Lithium	0.92J	ug/L	2.5	02/16/24 01:07	
EPA 6020B	Manganese	332	ug/L	6.0	02/16/24 20:26	
EPA 6020B	Tin	0.74J	ug/L	1.0	02/16/24 01:07	
SM 2540C-2015	Total Dissolved Solids	232	mg/L	10.0	02/20/24 15:35	
EPA 9056A	Chloride	8.5	mg/L	1.0	02/15/24 01:37	
EPA 9056A	Fluoride	0.19	mg/L	0.10	02/15/24 01:37	
EPA 9056A	Nitrate as N	0.071J	mg/L	0.10	02/15/24 01:37	
EPA 9056A	Sulfate	14.5	mg/L	1.0	02/15/24 01:37	
92713248002	**021324NMW25D**					
EPA 6010D	Arsenic	2.5J	ug/L	10.0	02/22/24 14:07	
EPA 6010D	Barium	31.9	ug/L	5.0	02/22/24 14:07	
EPA 6010D	Boron	21.4J	ug/L	50.0	02/22/24 14:07	
EPA 6010D	Calcium	27900	ug/L	100	02/22/24 14:07	
EPA 6010D	Chromium	3.0J	ug/L	5.0	02/22/24 14:07	
EPA 6010D	Copper	3.7J	ug/L	5.0	02/22/24 14:07	
EPA 6010D	Molybdenum	23.1	ug/L	5.0	02/22/24 14:07	
EPA 6010D	Nickel	2.9J	ug/L	5.0	02/22/24 14:07	
EPA 6010D	Silver	5.8	ug/L	5.0	02/22/24 14:07	
EPA 6010D	Hardness, Total(SM 2340B)	90100	ug/L	662	02/22/24 14:07	
EPA 6010D	Zinc	5.6J	ug/L	10.0	02/22/24 14:07	
EPA 6020B	Cobalt	1.1	ug/L	1.0	02/16/24 01:12	
EPA 6020B	Iron	1210	ug/L	50.0	02/16/24 01:12	
EPA 6020B	Lead	1.3	ug/L	1.0	02/16/24 01:12	
EPA 6020B	Lithium	3.0	ug/L	2.5	02/16/24 01:12	
EPA 6020B	Manganese	159	ug/L	2.0	02/16/24 01:12	
SM 2540C-2015	Total Dissolved Solids	178	mg/L	10.0	02/20/24 15:35	
EPA 9056A	Chloride	8.8	mg/L	1.0	02/15/24 02:20	
EPA 9056A	Sulfate	19.7	mg/L	1.0	02/15/24 02:20	
92713248003	**021324NMW26S**					
EPA 7199	Chromium, Hexavalent	0.22	ug/L	0.025	02/14/24 16:50	H1
EPA 6010D	Barium	20.7	ug/L	5.0	02/22/24 14:10	
EPA 6010D	Calcium	8520	ug/L	100	02/22/24 14:10	
EPA 6010D	Chromium	0.66J	ug/L	5.0	02/22/24 14:10	
EPA 6010D	Nickel	0.93J	ug/L	5.0	02/22/24 14:10	

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_D
Pace Project No.: 92713248

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92713248003	**021324NMW26S**					
EPA 6010D	Hardness, Total(SM 2340B)	27700	ug/L	662	02/22/24 14:10	
EPA 6020B	Iron	48.3J	ug/L	50.0	02/16/24 01:17	
EPA 6020B	Lithium	0.88J	ug/L	2.5	02/16/24 01:17	
EPA 6020B	Manganese	5.0	ug/L	2.0	02/16/24 01:17	
SM 2540C-2015	Total Dissolved Solids	105	mg/L	10.0	02/20/24 15:36	
EPA 9056A	Chloride	2.7	mg/L	1.0	02/15/24 03:46	
EPA 9056A	Nitrate as N	0.061J	mg/L	0.10	02/15/24 03:46	
EPA 9056A	Sulfate	2.6	mg/L	1.0	02/15/24 03:46	
92713248004	**021324NMW26D**					
EPA 6010D	Barium	198	ug/L	5.0	02/22/24 14:13	
EPA 6010D	Boron	5.7J	ug/L	50.0	02/22/24 14:13	
EPA 6010D	Calcium	44200	ug/L	100	02/22/24 14:13	
EPA 6010D	Copper	1.0J	ug/L	5.0	02/22/24 14:13	
EPA 6010D	Molybdenum	4.0J	ug/L	5.0	02/22/24 14:13	
EPA 6010D	Nickel	1.2J	ug/L	5.0	02/22/24 14:13	
EPA 6010D	Silver	0.52J	ug/L	5.0	02/22/24 14:13	
EPA 6010D	Hardness, Total(SM 2340B)	147000	ug/L	662	02/22/24 14:13	
EPA 6020B	Cobalt	1.1	ug/L	1.0	02/16/24 01:22	
EPA 6020B	Iron	2720	ug/L	50.0	02/16/24 01:22	
EPA 6020B	Lithium	5.0	ug/L	2.5	02/16/24 01:22	
EPA 6020B	Manganese	1180	ug/L	20.0	02/16/24 20:31	
SM 2540C-2015	Total Dissolved Solids	284	mg/L	10.0	02/20/24 15:37	
EPA 350.1 Rev 2.0 1993	Nitrogen, Ammonia	0.21	mg/L	0.10	03/07/24 00:35	
EPA 9056A	Chloride	10.6	mg/L	1.0	02/15/24 03:32	
EPA 9056A	Sulfate	48.5	mg/L	1.0	02/15/24 03:32	
92713248005	**021324NMW27S**					
EPA 6010D	Barium	85.6	ug/L	5.0	02/22/24 14:16	
EPA 6010D	Boron	1500	ug/L	50.0	02/22/24 14:16	
EPA 6010D	Calcium	122000	ug/L	1000	02/23/24 16:07	
EPA 6010D	Copper	1.4J	ug/L	5.0	02/22/24 14:16	
EPA 6010D	Nickel	2.2J	ug/L	5.0	02/22/24 14:16	
EPA 6010D	Silver	0.95J	ug/L	5.0	02/22/24 14:16	
EPA 6010D	Hardness, Total(SM 2340B)	536000	ug/L	6620	02/23/24 16:07	
EPA 6010D	Vanadium	3.3J	ug/L	5.0	02/22/24 14:16	
EPA 6020B	Cobalt	0.18J	ug/L	1.0	02/16/24 01:27	
EPA 6020B	Iron	124	ug/L	50.0	02/16/24 01:27	
EPA 6020B	Lithium	5.9	ug/L	2.5	02/16/24 01:27	
EPA 6020B	Manganese	21.6	ug/L	2.0	02/16/24 01:27	
SM 2540C-2015	Total Dissolved Solids	670	mg/L	10.0	02/20/24 15:37	
EPA 9056A	Chloride	11.2	mg/L	1.0	02/15/24 02:48	
EPA 9056A	Fluoride	0.054J	mg/L	0.10	02/15/24 02:48	
EPA 9056A	Sulfate	153	mg/L	3.0	02/15/24 08:35	
92713248006	**021424NMW28**					
EPA 7199	Chromium, Hexavalent	0.73	ug/L	0.12	02/15/24 13:32	
EPA 6010D	Barium	42.6	ug/L	5.0	02/20/24 19:28	
EPA 6010D	Boron	231	ug/L	50.0	02/20/24 19:28	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: Bremo_1SA2024_CCR&VSWMR_P_D
Pace Project No.: 92713248

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92713248006	**021424NMW28**					
EPA 6010D	Calcium	54900	ug/L	100	02/21/24 12:09	
EPA 6010D	Chromium	1.4J	ug/L	5.0	02/21/24 12:09	
EPA 6010D	Copper	0.75J	ug/L	5.0	02/21/24 12:09	B
EPA 6010D	Nickel	11.3	ug/L	5.0	02/20/24 19:28	
EPA 6010D	Hardness, Total(SM 2340B)	224000	ug/L	662	02/21/24 12:09	
EPA 6010D	Vanadium	2.0J	ug/L	5.0	02/21/24 12:09	
EPA 6020B	Cobalt	0.14J	ug/L	1.0	02/20/24 06:10	
EPA 6020B	Iron	368	ug/L	50.0	02/20/24 06:10	L2
EPA 6020B	Lead	0.20J	ug/L	1.0	02/20/24 06:10	
EPA 6020B	Lithium	1.4J	ug/L	2.5	02/20/24 06:10	
EPA 6020B	Manganese	14.0	ug/L	2.0	02/20/24 06:10	
SM 2540C-2015	Total Dissolved Solids	343	mg/L	10.0	02/20/24 16:59	
EPA 9056A	Chloride	9.1	mg/L	1.0	02/16/24 01:50	
EPA 9056A	Nitrate as N	0.27	mg/L	0.10	02/16/24 01:50	
EPA 9056A	Sulfate	97.3	mg/L	1.0	02/16/24 01:50	

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PROJECT NARRATIVE

Project: Bremo_1SA2024_CCR&VSWMR_P_D
Pace Project No.: 92713248

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

General Information:
6 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.
- 021324NMW26D (Lab ID: 92713248004)
- 021324NMW26S (Lab ID: 92713248003)
- 021324NMW27S (Lab ID: 92713248005)

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: 832217

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92713247001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
- MS (Lab ID: 4300570)
  - Chromium, Hexavalent
- MSD (Lab ID: 4300571)
  - Chromium, Hexavalent

Additional Comments:

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PROJECT NARRATIVE

Project: Bremo_1SA2024_CCR&VSWMR_P_D
Pace Project No.: 92713248

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

General Information:
6 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_D
Pace Project No.: 92713248

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

General Information:
6 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_D
Pace Project No.: 92713248

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

General Information:
6 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_D
Pace Project No.: 92713248

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

General Information:
6 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_D
Pace Project No.: 92713248

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

General Information:
6 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_D
Pace Project No.: 92713248

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

General Information:
6 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: 832355

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92712989006,92713247001

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

- MS (Lab ID: 4301589)
  - Fluoride
- MS (Lab ID: 4301591)
  - Fluoride
- MSD (Lab ID: 4301590)
  - Fluoride
- MSD (Lab ID: 4301592)
  - Fluoride

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_D
Pace Project No.: 92713248

Sample: 021324NMW25S **Lab ID: 92713248001** Collected: 02/13/24 13:20 Received: 02/14/24 10:18 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	**0.032**	ug/L	0.025	0.025	1		02/14/24 12:07	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	02/15/24 13:40	02/22/24 14:04	7440-36-0	
Arsenic	ND	ug/L	10.0	2.5	1	02/15/24 13:40	02/22/24 14:04	7440-38-2	
Barium	**18.1**	ug/L	5.0	0.79	1	02/15/24 13:40	02/22/24 14:04	7440-39-3	
Beryllium	ND	ug/L	1.0	0.16	1	02/15/24 13:40	02/22/24 14:04	7440-41-7	
Boron	**19.0J**	ug/L	50.0	4.0	1	02/15/24 13:40	02/22/24 14:04	7440-42-8	
Cadmium	ND	ug/L	1.0	0.29	1	02/15/24 13:40	02/22/24 14:04	7440-43-9	
Calcium	**39800**	ug/L	100	14.7	1	02/15/24 13:40	02/22/24 14:04	7440-70-2	
Chromium	ND	ug/L	5.0	0.63	1	02/15/24 13:40	02/22/24 14:04	7440-47-3	
Copper	**1.7J**	ug/L	5.0	0.62	1	02/15/24 13:40	02/22/24 14:04	7440-50-8	
Molybdenum	ND	ug/L	5.0	2.6	1	02/15/24 13:40	02/22/24 14:04	7439-98-7	
Nickel	**2.0J**	ug/L	5.0	0.88	1	02/15/24 13:40	02/22/24 14:04	7440-02-0	
Selenium	ND	ug/L	10.0	4.1	1	02/15/24 13:40	02/22/24 14:04	7782-49-2	
Silver	**4.2J**	ug/L	5.0	0.49	1	02/15/24 13:40	02/22/24 14:04	7440-22-4	
Hardness, Total(SM 2340B)	**142000**	ug/L	662	36.8	1	02/15/24 13:40	02/22/24 14:04		
Vanadium	ND	ug/L	5.0	1.6	1	02/15/24 13:40	02/22/24 14:04	7440-62-2	
Zinc	**4.9J**	ug/L	10.0	3.0	1	02/15/24 13:40	02/22/24 14:04	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Cobalt	**4.0**	ug/L	1.0	0.050	1	02/15/24 13:55	02/16/24 01:07	7440-48-4	
Iron	**1120**	ug/L	50.0	20.9	1	02/15/24 13:55	02/16/24 01:07	7439-89-6	
Lead	**0.18J**	ug/L	1.0	0.077	1	02/15/24 13:55	02/16/24 01:07	7439-92-1	
Lithium	**0.92J**	ug/L	2.5	0.50	1	02/15/24 13:55	02/16/24 01:07	7439-93-2	
Manganese	**332**	ug/L	6.0	3.1	3	02/15/24 13:55	02/16/24 20:26	7439-96-5	
Thallium	ND	ug/L	0.20	0.050	1	02/15/24 13:55	02/16/24 01:07	7440-28-0	
Tin	**0.74J**	ug/L	1.0	0.43	1	02/15/24 13:55	02/16/24 01:07	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 10:03	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		02/20/24 15:35		
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 00:04	7664-41-7	

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ANALYTICAL RESULTS

Project: Bremo_1SA2024_CCR&VSWMR_P_D
Pace Project No.: 92713248

Sample: 021324NMW25S **Lab ID: 92713248001** Collected: 02/13/24 13:20 Received: 02/14/24 10:18 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		02/15/24 01:37	16887-00-6	
Fluoride	**0.19**	mg/L	0.10	0.050	1		02/15/24 01:37	16984-48-8	
Nitrate as N	**0.071J**	mg/L	0.10	0.060	1		02/15/24 01:37	14797-55-8	
Sulfate	**14.5**	mg/L	1.0	0.50	1		02/15/24 01:37	14808-79-8	

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ANALYTICAL RESULTS

Project: Bremo_1SA2024_CCR&VSWMR_P_D
Pace Project No.: 92713248

Sample: 021324NMW25D **Lab ID: 92713248002** Collected: 02/13/24 14:10 Received: 02/14/24 10:18 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		02/14/24 13:36	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	02/15/24 13:40	02/22/24 14:07	7440-36-0	
Arsenic	**2.5J**	ug/L	10.0	2.5	1	02/15/24 13:40	02/22/24 14:07	7440-38-2	
Barium	**31.9**	ug/L	5.0	0.79	1	02/15/24 13:40	02/22/24 14:07	7440-39-3	
Beryllium	ND	ug/L	1.0	0.16	1	02/15/24 13:40	02/22/24 14:07	7440-41-7	
Boron	**21.4J**	ug/L	50.0	4.0	1	02/15/24 13:40	02/22/24 14:07	7440-42-8	
Cadmium	ND	ug/L	1.0	0.29	1	02/15/24 13:40	02/22/24 14:07	7440-43-9	
Calcium	**27900**	ug/L	100	14.7	1	02/15/24 13:40	02/22/24 14:07	7440-70-2	
Chromium	**3.0J**	ug/L	5.0	0.63	1	02/15/24 13:40	02/22/24 14:07	7440-47-3	
Copper	**3.7J**	ug/L	5.0	0.62	1	02/15/24 13:40	02/22/24 14:07	7440-50-8	
Molybdenum	**23.1**	ug/L	5.0	2.6	1	02/15/24 13:40	02/22/24 14:07	7439-98-7	
Nickel	**2.9J**	ug/L	5.0	0.88	1	02/15/24 13:40	02/22/24 14:07	7440-02-0	
Selenium	ND	ug/L	10.0	4.1	1	02/15/24 13:40	02/22/24 14:07	7782-49-2	
Silver	**5.8**	ug/L	5.0	0.49	1	02/15/24 13:40	02/22/24 14:07	7440-22-4	
Hardness, Total(SM 2340B)	**90100**	ug/L	662	36.8	1	02/15/24 13:40	02/22/24 14:07		
Vanadium	ND	ug/L	5.0	1.6	1	02/15/24 13:40	02/22/24 14:07	7440-62-2	
Zinc	**5.6J**	ug/L	10.0	3.0	1	02/15/24 13:40	02/22/24 14:07	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Cobalt	**1.1**	ug/L	1.0	0.050	1	02/15/24 13:55	02/16/24 01:12	7440-48-4	
Iron	**1210**	ug/L	50.0	20.9	1	02/15/24 13:55	02/16/24 01:12	7439-89-6	
Lead	**1.3**	ug/L	1.0	0.077	1	02/15/24 13:55	02/16/24 01:12	7439-92-1	
Lithium	**3.0**	ug/L	2.5	0.50	1	02/15/24 13:55	02/16/24 01:12	7439-93-2	
Manganese	**159**	ug/L	2.0	1.0	1	02/15/24 13:55	02/16/24 01:12	7439-96-5	
Thallium	ND	ug/L	0.20	0.050	1	02/15/24 13:55	02/16/24 01:12	7440-28-0	
Tin	ND	ug/L	1.0	0.43	1	02/15/24 13:55	02/16/24 01:12	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	02/17/24 15:38	02/20/24 10:05	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**178**	mg/L	10.0	10.0	1		02/20/24 15:35		
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 00:05	7664-41-7	

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ANALYTICAL RESULTS

Project: Bremo_1SA2024_CCR&VSWMR_P_D
Pace Project No.: 92713248

Sample: 021324NMW25D **Lab ID: 92713248002** Collected: 02/13/24 14:10 Received: 02/14/24 10:18 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		02/15/24 02:20	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/15/24 02:20	16984-48-8	
Nitrate as N	ND	mg/L	0.10	0.060	1		02/15/24 02:20	14797-55-8	
Sulfate	**19.7**	mg/L	1.0	0.50	1		02/15/24 02:20	14808-79-8	

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ANALYTICAL RESULTS

Project: Bremo_1SA2024_CCR&VSWMR_P_D
Pace Project No.: 92713248

Sample: 021324NMW26S **Lab ID: 92713248003** Collected: 02/13/24 15:35 Received: 02/14/24 10:18 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	**0.22**	ug/L	0.025	0.025	1		02/14/24 16:50	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	02/15/24 13:40	02/22/24 14:10	7440-36-0	
Arsenic	ND	ug/L	10.0	2.5	1	02/15/24 13:40	02/22/24 14:10	7440-38-2	
Barium	**20.7**	ug/L	5.0	0.79	1	02/15/24 13:40	02/22/24 14:10	7440-39-3	
Beryllium	ND	ug/L	1.0	0.16	1	02/15/24 13:40	02/22/24 14:10	7440-41-7	
Boron	ND	ug/L	50.0	4.0	1	02/15/24 13:40	02/22/24 14:10	7440-42-8	
Cadmium	ND	ug/L	1.0	0.29	1	02/15/24 13:40	02/22/24 14:10	7440-43-9	
Calcium	**8520**	ug/L	100	14.7	1	02/15/24 13:40	02/22/24 14:10	7440-70-2	
Chromium	**0.66J**	ug/L	5.0	0.63	1	02/15/24 13:40	02/22/24 14:10	7440-47-3	
Copper	ND	ug/L	5.0	0.62	1	02/15/24 13:40	02/22/24 14:10	7440-50-8	
Molybdenum	ND	ug/L	5.0	2.6	1	02/15/24 13:40	02/22/24 14:10	7439-98-7	
Nickel	**0.93J**	ug/L	5.0	0.88	1	02/15/24 13:40	02/22/24 14:10	7440-02-0	
Selenium	ND	ug/L	10.0	4.1	1	02/15/24 13:40	02/22/24 14:10	7782-49-2	
Silver	ND	ug/L	5.0	0.49	1	02/15/24 13:40	02/22/24 14:10	7440-22-4	
Hardness, Total(SM 2340B)	**27700**	ug/L	662	36.8	1	02/15/24 13:40	02/22/24 14:10		
Vanadium	ND	ug/L	5.0	1.6	1	02/15/24 13:40	02/22/24 14:10	7440-62-2	
Zinc	ND	ug/L	10.0	3.0	1	02/15/24 13:40	02/22/24 14:10	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	02/15/24 13:55	02/16/24 01:17	7440-48-4	
Iron	**48.3J**	ug/L	50.0	20.9	1	02/15/24 13:55	02/16/24 01:17	7439-89-6	
Lead	ND	ug/L	1.0	0.077	1	02/15/24 13:55	02/16/24 01:17	7439-92-1	
Lithium	**0.88J**	ug/L	2.5	0.50	1	02/15/24 13:55	02/16/24 01:17	7439-93-2	
Manganese	**5.0**	ug/L	2.0	1.0	1	02/15/24 13:55	02/16/24 01:17	7439-96-5	
Thallium	ND	ug/L	0.20	0.050	1	02/15/24 13:55	02/16/24 01:17	7440-28-0	
Tin	ND	ug/L	1.0	0.43	1	02/15/24 13:55	02/16/24 01:17	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 10:08	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**105**	mg/L	10.0	10.0	1		02/20/24 15:36		
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 00:10	7664-41-7	

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ANALYTICAL RESULTS

Project: Bremo_1SA2024_CCR&VSWMR_P_D
Pace Project No.: 92713248

Sample: 021324NMW26S **Lab ID: 92713248003** Collected: 02/13/24 15:35 Received: 02/14/24 10:18 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	**2.7**	mg/L	1.0	0.60	1		02/15/24 03:46	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/15/24 03:46	16984-48-8	
Nitrate as N	**0.061J**	mg/L	0.10	0.060	1		02/15/24 03:46	14797-55-8	
Sulfate	**2.6**	mg/L	1.0	0.50	1		02/15/24 03:46	14808-79-8	

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ANALYTICAL RESULTS

Project: Bremo_1SA2024_CCR&VSWMR_P_D
Pace Project No.: 92713248

Sample: 021324NMW26D **Lab ID: 92713248004** Collected: 02/13/24 14:55 Received: 02/14/24 10:18 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		02/14/24 16:33	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	02/15/24 13:40	02/22/24 14:13	7440-36-0	
Arsenic	ND	ug/L	10.0	2.5	1	02/15/24 13:40	02/22/24 14:13	7440-38-2	
Barium	**198**	ug/L	5.0	0.79	1	02/15/24 13:40	02/22/24 14:13	7440-39-3	
Beryllium	ND	ug/L	1.0	0.16	1	02/15/24 13:40	02/22/24 14:13	7440-41-7	
Boron	**5.7J**	ug/L	50.0	4.0	1	02/15/24 13:40	02/22/24 14:13	7440-42-8	
Cadmium	ND	ug/L	1.0	0.29	1	02/15/24 13:40	02/22/24 14:13	7440-43-9	
Calcium	**44200**	ug/L	100	14.7	1	02/15/24 13:40	02/22/24 14:13	7440-70-2	
Chromium	ND	ug/L	5.0	0.63	1	02/15/24 13:40	02/22/24 14:13	7440-47-3	
Copper	**1.0J**	ug/L	5.0	0.62	1	02/15/24 13:40	02/22/24 14:13	7440-50-8	
Molybdenum	**4.0J**	ug/L	5.0	2.6	1	02/15/24 13:40	02/22/24 14:13	7439-98-7	
Nickel	**1.2J**	ug/L	5.0	0.88	1	02/15/24 13:40	02/22/24 14:13	7440-02-0	
Selenium	ND	ug/L	10.0	4.1	1	02/15/24 13:40	02/22/24 14:13	7782-49-2	
Silver	**0.52J**	ug/L	5.0	0.49	1	02/15/24 13:40	02/22/24 14:13	7440-22-4	
Hardness, Total(SM 2340B)	**147000**	ug/L	662	36.8	1	02/15/24 13:40	02/22/24 14:13		
Vanadium	ND	ug/L	5.0	1.6	1	02/15/24 13:40	02/22/24 14:13	7440-62-2	
Zinc	ND	ug/L	10.0	3.0	1	02/15/24 13:40	02/22/24 14:13	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Cobalt	**1.1**	ug/L	1.0	0.050	1	02/15/24 13:55	02/16/24 01:22	7440-48-4	
Iron	**2720**	ug/L	50.0	20.9	1	02/15/24 13:55	02/16/24 01:22	7439-89-6	
Lead	ND	ug/L	1.0	0.077	1	02/15/24 13:55	02/16/24 01:22	7439-92-1	
Lithium	**5.0**	ug/L	2.5	0.50	1	02/15/24 13:55	02/16/24 01:22	7439-93-2	
Manganese	**1180**	ug/L	20.0	10.2	10	02/15/24 13:55	02/16/24 20:31	7439-96-5	
Thallium	ND	ug/L	0.20	0.050	1	02/15/24 13:55	02/16/24 01:22	7440-28-0	
Tin	ND	ug/L	1.0	0.43	1	02/15/24 13:55	02/16/24 01:22	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 10:14	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**284**	mg/L	10.0	10.0	1		02/20/24 15:37		
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 00:35	7664-41-7	

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ANALYTICAL RESULTS

Project: Bremo_1SA2024_CCR&VSWMR_P_D
Pace Project No.: 92713248

Sample: 021324NMW26D **Lab ID: 92713248004** Collected: 02/13/24 14:55 Received: 02/14/24 10:18 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	**10.6**	mg/L	1.0	0.60	1		02/15/24 03:32	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/15/24 03:32	16984-48-8	
Nitrate as N	ND	mg/L	0.10	0.060	1		02/15/24 03:32	14797-55-8	
Sulfate	**48.5**	mg/L	1.0	0.50	1		02/15/24 03:32	14808-79-8	

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ANALYTICAL RESULTS

Project: Bremo_1SA2024_CCR&VSWMR_P_D
Pace Project No.: 92713248

Sample: 021324NMW27S **Lab ID: 92713248005** Collected: 02/13/24 14:50 Received: 02/14/24 10:18 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		02/14/24 16:15	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	02/15/24 13:40	02/22/24 14:16	7440-36-0	
Arsenic	ND	ug/L	10.0	2.5	1	02/15/24 13:40	02/22/24 14:16	7440-38-2	
Barium	**85.6**	ug/L	5.0	0.79	1	02/15/24 13:40	02/22/24 14:16	7440-39-3	
Beryllium	ND	ug/L	1.0	0.16	1	02/15/24 13:40	02/22/24 14:16	7440-41-7	
Boron	**1500**	ug/L	50.0	4.0	1	02/15/24 13:40	02/22/24 14:16	7440-42-8	
Cadmium	ND	ug/L	1.0	0.29	1	02/15/24 13:40	02/22/24 14:16	7440-43-9	
Calcium	**122000**	ug/L	1000	147	10	02/15/24 13:40	02/23/24 16:07	7440-70-2	
Chromium	ND	ug/L	5.0	0.63	1	02/15/24 13:40	02/22/24 14:16	7440-47-3	
Copper	**1.4J**	ug/L	5.0	0.62	1	02/15/24 13:40	02/22/24 14:16	7440-50-8	
Molybdenum	ND	ug/L	5.0	2.6	1	02/15/24 13:40	02/22/24 14:16	7439-98-7	
Nickel	**2.2J**	ug/L	5.0	0.88	1	02/15/24 13:40	02/22/24 14:16	7440-02-0	
Selenium	ND	ug/L	10.0	4.1	1	02/15/24 13:40	02/22/24 14:16	7782-49-2	
Silver	**0.95J**	ug/L	5.0	0.49	1	02/15/24 13:40	02/22/24 14:16	7440-22-4	
Hardness, Total(SM 2340B)	**536000**	ug/L	6620	368	10	02/15/24 13:40	02/23/24 16:07		
Vanadium	**3.3J**	ug/L	5.0	1.6	1	02/15/24 13:40	02/22/24 14:16	7440-62-2	
Zinc	ND	ug/L	10.0	3.0	1	02/15/24 13:40	02/22/24 14:16	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Cobalt	**0.18J**	ug/L	1.0	0.050	1	02/15/24 13:55	02/16/24 01:27	7440-48-4	
Iron	**124**	ug/L	50.0	20.9	1	02/15/24 13:55	02/16/24 01:27	7439-89-6	
Lead	ND	ug/L	1.0	0.077	1	02/15/24 13:55	02/16/24 01:27	7439-92-1	
Lithium	**5.9**	ug/L	2.5	0.50	1	02/15/24 13:55	02/16/24 01:27	7439-93-2	
Manganese	**21.6**	ug/L	2.0	1.0	1	02/15/24 13:55	02/16/24 01:27	7439-96-5	
Thallium	ND	ug/L	0.20	0.050	1	02/15/24 13:55	02/16/24 01:27	7440-28-0	
Tin	ND	ug/L	1.0	0.43	1	02/15/24 13:55	02/16/24 01:27	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 10:16	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**670**	mg/L	10.0	10.0	1		02/20/24 15:37		
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 00:37	7664-41-7	

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ANALYTICAL RESULTS

Project: Bremo_1SA2024_CCR&VSWMR_P_D
Pace Project No.: 92713248

Sample: 021324NMW27S **Lab ID: 92713248005** Collected: 02/13/24 14:50 Received: 02/14/24 10:18 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		02/15/24 02:48	16887-00-6	
Fluoride	**0.054J**	mg/L	0.10	0.050	1		02/15/24 02:48	16984-48-8	
Nitrate as N	ND	mg/L	0.10	0.060	1		02/15/24 02:48	14797-55-8	
Sulfate	**153**	mg/L	3.0	1.5	3		02/15/24 08:35	14808-79-8	

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ANALYTICAL RESULTS

Project: Bremo_1SA2024_CCR&VSWMR_P_D
Pace Project No.: 92713248

Sample: 021424NMW28 **Lab ID: 92713248006** Collected: 02/14/24 14:05 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	**0.73**	ug/L	0.12	0.12	5		02/15/24 13:32	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	02/20/24 19:28	7440-36-0	
Arsenic	ND	ug/L	10.0	2.5	1	02/16/24 12:55	02/20/24 19:28	7440-38-2	
Barium	**42.6**	ug/L	5.0	0.79	1	02/16/24 12:55	02/20/24 19:28	7440-39-3	
Beryllium	ND	ug/L	1.0	0.16	1	02/16/24 12:55	02/20/24 19:28	7440-41-7	
Boron	**231**	ug/L	50.0	4.0	1	02/16/24 12:55	02/20/24 19:28	7440-42-8	
Cadmium	ND	ug/L	1.0	0.29	1	02/16/24 12:55	02/21/24 12:09	7440-43-9	
Calcium	**54900**	ug/L	100	14.7	1	02/16/24 12:55	02/21/24 12:09	7440-70-2	
Chromium	**1.4J**	ug/L	5.0	0.63	1	02/16/24 12:55	02/21/24 12:09	7440-47-3	
Copper	**0.75J**	ug/L	5.0	0.62	1	02/16/24 12:55	02/21/24 12:09	7440-50-8	B
Molybdenum	ND	ug/L	5.0	2.6	1	02/16/24 12:55	02/20/24 19:28	7439-98-7	
Nickel	**11.3**	ug/L	5.0	0.88	1	02/16/24 12:55	02/20/24 19:28	7440-02-0	
Selenium	ND	ug/L	10.0	4.1	1	02/16/24 12:55	02/20/24 19:28	7782-49-2	
Silver	ND	ug/L	5.0	0.49	1	02/16/24 12:55	02/21/24 12:09	7440-22-4	
Hardness, Total(SM 2340B)	**224000**	ug/L	662	36.8	1	02/16/24 12:55	02/21/24 12:09		
Vanadium	**2.0J**	ug/L	5.0	1.6	1	02/16/24 12:55	02/21/24 12:09	7440-62-2	
Zinc	ND	ug/L	10.0	3.0	1	02/16/24 12:55	02/20/24 19:28	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Cobalt	**0.14J**	ug/L	1.0	0.050	1	02/16/24 16:20	02/20/24 06:10	7440-48-4	
Iron	**368**	ug/L	50.0	20.9	1	02/16/24 16:20	02/20/24 06:10	7439-89-6	L2
Lead	**0.20J**	ug/L	1.0	0.077	1	02/16/24 16:20	02/20/24 06:10	7439-92-1	
Lithium	**1.4J**	ug/L	2.5	0.50	1	02/16/24 16:20	02/20/24 06:10	7439-93-2	
Manganese	**14.0**	ug/L	2.0	1.0	1	02/16/24 16:20	02/20/24 06:10	7439-96-5	
Thallium	ND	ug/L	0.20	0.050	1	02/16/24 16:20	02/20/24 06:10	7440-28-0	
Tin	ND	ug/L	1.0	0.43	1	02/16/24 16:20	02/20/24 06:10	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 10:31	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**343**	mg/L	10.0	10.0	1		02/20/24 16:59		
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 00:38	7664-41-7	

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ANALYTICAL RESULTS

Project: Bremo_1SA2024_CCR&VSWMR_P_D
Pace Project No.: 92713248

Sample: 021424NMW28 **Lab ID: 92713248006** Collected: 02/14/24 14:05 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	**9.1**	mg/L	1.0	0.60	1		02/16/24 01:50	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		02/16/24 01:50	16984-48-8	
Nitrate as N	**0.27**	mg/L	0.10	0.060	1		02/16/24 01:50	14797-55-8	
Sulfate	**97.3**	mg/L	1.0	0.50	1		02/16/24 01:50	14808-79-8	

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QUALITY CONTROL DATA

Project: Bremo_1SA2024_CCR&VSWMR_P_D
Pace Project No.: 92713248

QC Batch: 832216
QC Batch Method: EPA 7199
Analysis Method: EPA 7199
Analysis Description: 7199 Chromium, Hexavalent
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92713248001

METHOD BLANK: 4300564 Matrix: Water
Associated Lab Samples: 92713248001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chromium, Hexavalent	ug/L	ND	0.025	0.025	02/14/24 21:21	

LABORATORY CONTROL SAMPLE: 4300565

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	ug/L	0.1	0.094	94	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4300566 4300567

Parameter	Units	92712989006 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	0.025	0.1	0.1	0.12	0.12	90	91	90-110	1	20	H1

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QUALITY CONTROL DATA

Project: Bremo_1SA2024_CCR&VSWMR_P_D
Pace Project No.: 92713248

QC Batch: 832217
QC Batch Method: EPA 7199
Analysis Method: EPA 7199
Analysis Description: 7199 Chromium, Hexavalent
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92713248002, 92713248003, 92713248004, 92713248005

METHOD BLANK: 4300568 Matrix: Water
Associated Lab Samples: 92713248002, 92713248003, 92713248004, 92713248005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chromium, Hexavalent	ug/L	ND	0.025	0.025	02/14/24 21:57	

LABORATORY CONTROL SAMPLE: 4300569

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	ug/L	0.1	0.095	95	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4300570 4300571

Parameter	Units	92713247001 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	0.31	0.1	0.1	0.40	0.39	88	80	90-110	2	20	H1,M1

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QUALITY CONTROL DATA

Project: Bremo_1SA2024_CCR&VSWMR_P_D
Pace Project No.: 92713248

QC Batch: 832547
QC Batch Method: EPA 7199
Analysis Method: EPA 7199
Analysis Description: 7199 Chromium, Hexavalent
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92713248006

METHOD BLANK: 4302264 Matrix: Water
Associated Lab Samples: 92713248006

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_D
Pace Project No.: 92713248

QC Batch: 833175
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92713248001, 92713248002, 92713248003, 92713248004, 92713248005, 92713248006

METHOD BLANK: 4305621 Matrix: Water
Associated Lab Samples: 92713248001, 92713248002, 92713248003, 92713248004, 92713248005, 92713248006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	ug/L	ND	0.20	0.12	02/20/24 09:34	

LABORATORY CONTROL SAMPLE: 4305622

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: 4305623 4305624

Parameter	Units	92713247001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	0.15J	2.5	2.5	2.6	2.6	100	97	75-125	3	25	

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QUALITY CONTROL DATA

Project: Bremo_1SA2024_CCR&VSWMR_P_D
Pace Project No.: 92713248

QC Batch: 832572
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92713248001, 92713248002, 92713248003, 92713248004, 92713248005

METHOD BLANK: 4302448 Matrix: Water
Associated Lab Samples: 92713248001, 92713248002, 92713248003, 92713248004, 92713248005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Antimony	ug/L	ND	5.0	3.6	02/22/24 13:16	
Arsenic	ug/L	ND	10.0	2.5	02/22/24 13:16	
Barium	ug/L	ND	5.0	0.79	02/22/24 13:16	
Beryllium	ug/L	ND	1.0	0.16	02/22/24 13:16	
Boron	ug/L	ND	50.0	4.0	02/22/24 13:16	
Cadmium	ug/L	ND	1.0	0.29	02/22/24 13:16	
Calcium	ug/L	ND	100	14.7	02/22/24 13:16	
Chromium	ug/L	ND	5.0	0.63	02/22/24 13:16	
Copper	ug/L	ND	5.0	0.62	02/22/24 13:16	
Hardness, Total(SM 2340B)	ug/L	ND	662	36.8	02/22/24 13:16	
Molybdenum	ug/L	ND	5.0	2.6	02/22/24 13:16	
Nickel	ug/L	ND	5.0	0.88	02/22/24 13:16	
Selenium	ug/L	ND	10.0	4.1	02/22/24 13:16	
Silver	ug/L	ND	5.0	0.49	02/22/24 13:16	
Vanadium	ug/L	ND	5.0	1.6	02/22/24 13:16	
Zinc	ug/L	ND	10.0	3.0	02/22/24 13:16	

LABORATORY CONTROL SAMPLE: 4302449

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	500	524	105	80-120	
Arsenic	ug/L	500	518	104	80-120	
Barium	ug/L	500	537	107	80-120	
Beryllium	ug/L	500	516	103	80-120	
Boron	ug/L	500	515	103	80-120	
Cadmium	ug/L	500	508	102	80-120	
Calcium	ug/L	5000	5180	104	80-120	
Chromium	ug/L	500	510	102	80-120	
Copper	ug/L	500	517	103	80-120	
Hardness, Total(SM 2340B)	ug/L	33100	33300	101	80-120	
Molybdenum	ug/L	500	522	104	80-120	
Nickel	ug/L	500	509	102	80-120	
Selenium	ug/L	500	509	102	80-120	
Silver	ug/L	250	252	101	80-120	
Vanadium	ug/L	500	510	102	80-120	
Zinc	ug/L	500	515	103	80-120	

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QUALITY CONTROL DATA

Project: Bremo_1SA2024_CCR&VSWMR_P_D
Pace Project No.: 92713248

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4302450 4302451

Parameter	Units	92712989006 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	541	547	108	109	75-125	1	20	
Arsenic	ug/L	ND	500	500	534	538	107	108	75-125	1	20	
Barium	ug/L	13.0	500	500	557	552	109	108	75-125	1	20	
Beryllium	ug/L	ND	500	500	538	542	108	108	75-125	1	20	
Boron	ug/L	ND	500	500	537	540	107	108	75-125	1	20	
Cadmium	ug/L	ND	500	500	520	524	104	105	75-125	1	20	
Calcium	ug/L	2970	5000	5000	8470	8150	110	104	75-125	4	20	
Chromium	ug/L	ND	500	500	525	529	105	106	75-125	1	20	
Copper	ug/L	0.97J	500	500	519	524	104	105	75-125	1	20	
Hardness, Total(SM 2340B)	ug/L	15200	33100	33100	50400	49900	107	105	75-125	1	20	
Molybdenum	ug/L	ND	500	500	527	532	105	106	75-125	1	20	
Nickel	ug/L	ND	500	500	518	523	104	104	75-125	1	20	
Selenium	ug/L	ND	500	500	546	551	109	110	75-125	1	20	
Silver	ug/L	ND	250	250	259	261	103	104	75-125	1	20	
Vanadium	ug/L	ND	500	500	521	525	104	105	75-125	1	20	
Zinc	ug/L	4.0J	500	500	531	535	105	106	75-125	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4302452 4302453

Parameter	Units	92713247001 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	559	554	112	111	75-125	1	20	
Arsenic	ug/L	ND	500	500	547	544	109	109	75-125	1	20	
Barium	ug/L	40.8	500	500	572	576	106	107	75-125	1	20	
Beryllium	ug/L	ND	500	500	549	543	110	109	75-125	1	20	
Boron	ug/L	1400	500	500	2000	1990	121	118	75-125	1	20	
Cadmium	ug/L	ND	500	500	520	516	104	103	75-125	1	20	
Calcium	ug/L	35300	5000	5000	40900	41300	112	119	75-125	1	20	
Chromium	ug/L	ND	500	500	533	527	106	105	75-125	1	20	
Copper	ug/L	ND	500	500	536	533	107	107	75-125	1	20	
Hardness, Total(SM 2340B)	ug/L	143000	33100	33100	182000	183000	117	119	75-125	0	20	
Molybdenum	ug/L	ND	500	500	539	535	108	107	75-125	1	20	
Nickel	ug/L	0.90J	500	500	513	510	102	102	75-125	1	20	
Selenium	ug/L	ND	500	500	556	552	111	110	75-125	1	20	
Silver	ug/L	ND	250	250	268	265	107	106	75-125	1	20	
Vanadium	ug/L	ND	500	500	529	525	106	105	75-125	1	20	
Zinc	ug/L	ND	500	500	525	522	105	104	75-125	1	20	

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QUALITY CONTROL DATA

Project: Bremo_1SA2024_CCR&VSWMR_P_D
Pace Project No.: 92713248

QC Batch: 832927
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92713248006

METHOD BLANK: 4304175 Matrix: Water
Associated Lab Samples: 92713248006

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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QUALITY CONTROL DATA

Project: Bremo_1SA2024_CCR&VSWMR_P_D
Pace Project No.: 92713248

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_D
Pace Project No.: 92713248

QC Batch: 832575
QC Batch Method: EPA 3010A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92713248001, 92713248002, 92713248003, 92713248004, 92713248005

METHOD BLANK: 4302470 Matrix: Water
Associated Lab Samples: 92713248001, 92713248002, 92713248003, 92713248004, 92713248005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Cobalt	ug/L	ND	1.0	0.050	02/15/24 23:17	
Iron	ug/L	ND	50.0	20.9	02/15/24 23:17	
Lead	ug/L	ND	1.0	0.077	02/15/24 23:17	
Lithium	ug/L	ND	2.5	0.50	02/15/24 23:17	
Manganese	ug/L	ND	2.0	1.0	02/15/24 23:17	
Thallium	ug/L	ND	0.20	0.050	02/15/24 23:17	
Tin	ug/L	ND	1.0	0.43	02/15/24 23:17	

LABORATORY CONTROL SAMPLE: 4302471

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cobalt	ug/L	50	53.7	107	80-120	
Iron	ug/L	1250	1340	107	80-120	
Lead	ug/L	50	54.2	108	80-120	
Lithium	ug/L	50	53.7	107	80-120	
Manganese	ug/L	50	52.3	105	80-120	
Thallium	ug/L	25	26.2	105	80-120	
Tin	ug/L	50	52.4	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4302472 4302473

Parameter	Units	92712989006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cobalt	ug/L	1.1	50	50	53.4	55.6	105	109	75-125	4	20	
Iron	ug/L	149	1250	1250	1460	1520	105	110	75-125	4	20	
Lead	ug/L	ND	50	50	53.5	54.9	107	110	75-125	3	20	
Lithium	ug/L	ND	50	50	52.4	53.9	104	107	75-125	3	20	
Manganese	ug/L	37.3	50	50	85.3	88.6	96	103	75-125	4	20	
Thallium	ug/L	ND	25	25	26.0	26.6	104	106	75-125	2	20	
Tin	ug/L	ND	50	50	52.0	54.9	104	109	75-125	5	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4302474 4302475

Parameter	Units	92713247001 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	51.8	51.7	104	103	75-125	0	20	

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QUALITY CONTROL DATA

Project: Bremo_1SA2024_CCR&VSWMR_P_D
Pace Project No.: 92713248

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4302474 4302475

Parameter	Units	92713247001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Iron	ug/L	ND	1250	1250	1310	1310	104	104	75-125	0	20	
Lead	ug/L	ND	50	50	53.6	53.6	107	107	75-125	0	20	
Lithium	ug/L	7.1	50	50	58.5	58.7	103	103	75-125	0	20	
Manganese	ug/L	4.3	50	50	55.7	55.5	103	102	75-125	0	20	
Thallium	ug/L	ND	25	25	26.2	26.3	105	105	75-125	0	20	
Tin	ug/L	ND	50	50	52.8	52.8	106	105	75-125	0	20	

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REPORT OF LABORATORY ANALYSIS

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(704)875-9092

QUALITY CONTROL DATA

Project: Bremo_1SA2024_CCR&VSWMR_P_D
Pace Project No.: 92713248

QC Batch: 833004
QC Batch Method: EPA 3010A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92713248006

METHOD BLANK: 4304627 Matrix: Water
Associated Lab Samples: 92713248006

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_D
Pace Project No.: 92713248

QC Batch: 833515 | 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: 92713248001, 92713248002, 92713248003, 92713248004, 92713248005

METHOD BLANK: 4306953 Matrix: Water
Associated Lab Samples: 92713248001, 92713248002, 92713248003, 92713248004, 92713248005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	10.0	02/20/24 15:32	

LABORATORY CONTROL SAMPLE: 4306954

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	250	246	98	80-120	

SAMPLE DUPLICATE: 4306955

Parameter	Units	92713247001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	254	253	0	25	

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QUALITY CONTROL DATA

Project: Bremo_1SA2024_CCR&VSWMR_P_D
Pace Project No.: 92713248

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: 92713248006

METHOD BLANK: 4307410 Matrix: Water
Associated Lab Samples: 92713248006

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_D
Pace Project No.: 92713248

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: 92713248001, 92713248002, 92713248003

METHOD BLANK: 4323787 Matrix: Water
Associated Lab Samples: 92713248001, 92713248002, 92713248003

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_D
Pace Project No.: 92713248

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: 92713248004, 92713248005, 92713248006

METHOD BLANK: 4323807 Matrix: Water
Associated Lab Samples: 92713248004, 92713248005, 92713248006

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_D
Pace Project No.: 92713248

QC Batch: 832355
QC Batch Method: EPA 9056A
Analysis Method: EPA 9056A
Analysis Description: 9056 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92713248001, 92713248002, 92713248003, 92713248004, 92713248005

METHOD BLANK: 4301587 Matrix: Water
Associated Lab Samples: 92713248001, 92713248002, 92713248003, 92713248004, 92713248005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.60	02/14/24 21:43	
Fluoride	mg/L	ND	0.10	0.050	02/14/24 21:43	
Nitrate as N	mg/L	ND	0.10	0.060	02/14/24 21:43	
Sulfate	mg/L	ND	1.0	0.50	02/14/24 21:43	

LABORATORY CONTROL SAMPLE: 4301588

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	50	48.9	98	90-110	
Fluoride	mg/L	2.5	2.5	101	90-110	
Nitrate as N	mg/L	2.5	2.4	94	90-110	
Sulfate	mg/L	50	49.6	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4301589 4301590

Parameter	Units	92712989006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	2.6	50	50	52.2	53.0	99	101	90-110	2	10	
Fluoride	mg/L	0.070J	2.5	2.5	3.6	3.3	140	129	90-110	8	10	M1
Nitrate as N	mg/L	0.10	2.5	2.5	2.5	2.5	96	97	90-110	2	10	
Sulfate	mg/L	3.1	50	50	58.3	56.6	110	107	90-110	3	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4301591 4301592

Parameter	Units	92713247001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	12.7	50	50	62.0	63.4	99	101	90-110	2	10	
Fluoride	mg/L	0.052J	2.5	2.5	2.9	3.0	113	116	90-110	3	10	M1
Nitrate as N	mg/L	ND	2.5	2.5	2.4	2.4	95	98	90-110	3	10	
Sulfate	mg/L	37.4	50	50	87.6	88.8	100	103	90-110	1	10	

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QUALITY CONTROL DATA

Project: Bremo_1SA2024_CCR&VSWMR_P_D
Pace Project No.: 92713248

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: 92713248006

METHOD BLANK: 4302020 Matrix: Water
Associated Lab Samples: 92713248006

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_D
Pace Project No.: 92713248

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_D
Pace Project No.: 92713248

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92713248001	**021324NMW25S**	EPA 7199	832216		
92713248002	**021324NMW25D**	EPA 7199	832217		
92713248003	**021324NMW26S**	EPA 7199	832217		
92713248004	**021324NMW26D**	EPA 7199	832217		
92713248005	**021324NMW27S**	EPA 7199	832217		
92713248006	**021424NMW28**	EPA 7199	832547		
92713248001	**021324NMW25S**	EPA 3010A	832572	EPA 6010D	832725
92713248002	**021324NMW25D**	EPA 3010A	832572	EPA 6010D	832725
92713248003	**021324NMW26S**	EPA 3010A	832572	EPA 6010D	832725
92713248004	**021324NMW26D**	EPA 3010A	832572	EPA 6010D	832725
92713248005	**021324NMW27S**	EPA 3010A	832572	EPA 6010D	832725
92713248006	**021424NMW28**	EPA 3010A	832927	EPA 6010D	833059
92713248001	**021324NMW25S**	EPA 3010A	832575	EPA 6020B	832736
92713248002	**021324NMW25D**	EPA 3010A	832575	EPA 6020B	832736
92713248003	**021324NMW26S**	EPA 3010A	832575	EPA 6020B	832736
92713248004	**021324NMW26D**	EPA 3010A	832575	EPA 6020B	832736
92713248005	**021324NMW27S**	EPA 3010A	832575	EPA 6020B	832736
92713248006	**021424NMW28**	EPA 3010A	833004	EPA 6020B	833104
92713248001	**021324NMW25S**	EPA 7470A	833175	EPA 7470A	833216
92713248002	**021324NMW25D**	EPA 7470A	833175	EPA 7470A	833216
92713248003	**021324NMW26S**	EPA 7470A	833175	EPA 7470A	833216
92713248004	**021324NMW26D**	EPA 7470A	833175	EPA 7470A	833216
92713248005	**021324NMW27S**	EPA 7470A	833175	EPA 7470A	833216
92713248006	**021424NMW28**	EPA 7470A	833175	EPA 7470A	833216
92713248001	**021324NMW25S**	SM 2540C-2015	833515		
92713248002	**021324NMW25D**	SM 2540C-2015	833515		
92713248003	**021324NMW26S**	SM 2540C-2015	833515		
92713248004	**021324NMW26D**	SM 2540C-2015	833515		
92713248005	**021324NMW27S**	SM 2540C-2015	833515		
92713248006	**021424NMW28**	SM 2540C-2015	833597		
92713248001	**021324NMW25S**	EPA 350.1 Rev 2.0 1993	837078		
92713248002	**021324NMW25D**	EPA 350.1 Rev 2.0 1993	837078		
92713248003	**021324NMW26S**	EPA 350.1 Rev 2.0 1993	837078		
92713248004	**021324NMW26D**	EPA 350.1 Rev 2.0 1993	837085		
92713248005	**021324NMW27S**	EPA 350.1 Rev 2.0 1993	837085		
92713248006	**021424NMW28**	EPA 350.1 Rev 2.0 1993	837085		
92713248001	**021324NMW25S**	EPA 9056A	832355		
92713248002	**021324NMW25D**	EPA 9056A	832355		
92713248003	**021324NMW26S**	EPA 9056A	832355		
92713248004	**021324NMW26D**	EPA 9056A	832355		
92713248005	**021324NMW27S**	EPA 9056A	832355		
92713248006	**021424NMW28**	EPA 9056A	832455		

REPORT OF LABORATORY ANALYSIS

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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#: 92713248

92713248

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

Carrier Tracking Number: NA

Custody Seal Present? ☑ Yes ☐ No Seals Intact? ☑ Yes ☐ No Date/Initials Person Examining Contents: GCG 2/14/24

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☑ IR Gun ID: 92160 Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp (°C): 1.3 Correction Factor: Add / Subtract (°C): -0.1

Corrected Cooler Temp (°C): 1.2

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:	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#: 92713248**

PM: AMB Due Date: 02/28/24

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)	BP/N	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		1	1		1	1															1				2				
4		1	1		1	1															1				2				
5		1	1		1	1															1				2				
6																													
7																													
8																													
9																													
10																													
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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.

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_D	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/FI/SO4/NO3	Radium 226	Radium 228 & Total Radium			Sample Comment	Preservation non-conformance identified for sample
0213 24NMW25S	WT	G			2/13/24	1320	7			X	X	X	X	X	X	X			-All samples preserved on ice	
0213 24NMW25D	WT	G			2/13/24	1410	7			X	X	X	X	X	X	X				
0213 24NMW26S	WT	G			2/13/24	1535	7			X	X	X	X	X	X	X				
0213 24NMW26D	WT	G			2/13/24	1455	7			X	X	X	X	X	X	X				
0213 24NMW27S	WT	G			2/13/24	1450	7			X	X	X	X	X	X	X				
~~02 24NMW28~~ MS	WT									X	X	X	X	X	X	X				

Lab Use Only:
Proj. Mgr: Angela Baioni
AcctNum / Client ID:
Table #:
Profile / Template: 13861
Prelog / Bottle Ord. ID: EZ 3059947

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

Additional Instructions from Pace®:

Collected By: (Printed Name) M. Knez, J. Davis, Z. Monkshine

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:	Tracking Number:
M. Knez / WSP	2/13/24 @ 1900	GMH Pace Itn	2/14/24 1018	
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/

ENV-FRM-CORQ-0019_v02_110123 ©

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
021324NMW25S	GCG	9.72	9.38	2/14/24 1114	18 Drops Acid	224809
021324NMW25D	GCG	9.69	9.47	2/14/24 1123	12 Drops Acid	224809
021324NMW26D	GCG	9.72	9.49	2/14/24 1140	12 Drops Acid	224809
021324NMW26S	GCG	~~9.45~~ GCG 9.66	9.45	2/14/24 1148	12 Drops Acid	224809
021324NMW27S	GCG	9.60	9.42	2/14/24 1138	8 Drops Acid	224809

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# : 92713248

92713248

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

Carrier Tracking Number: _____

Custody Seal Present? ☑ Yes ☐ No Seals Intact? ☑ Yes ☐ No Date/Initials Person Examining Contents: APL 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): 0.9, 0.6, 1.3 Correction Factor: Add / Subtract (°C) -0.1

Corrected Cooler Temp (°C): 0.8, 0.5, 1.2

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. 1AR
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: NY				
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: 0.9, 0.6, 1.3
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#: 92713248

PM: AMB Due Date: 02/28/24

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)	BPIN	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																													
3																													
4																													
5																													
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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_D	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)

**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	7199 Chromium, Hexavalent	9056 - Cl/F/SO4/NO3	Radium 226	Radium 228 & Total Radium				Sample Comment	Preservation non-conformance identified for sample.
~~02 24NMW25S~~ MK	WT									X	X	X	X	X	X	X				- All Samples	
~~02 24NMW25D~~ MK	WT									X	X	X	X	X	X	X				preserved on ice	
~~02 24NMW26S~~ MK	WT									X	X	X	X	X	X	X					
~~02 24NMW26D~~ MK	WT									X	X	X	X	X	X	X					
~~02 24NMW27S~~ MK	WT									X	X	X	X	X	X	X					
0214 24NMW28	WT	G			2/14/24	1405	7			X	X	X	X	X	X	X					

Lab Use Only

Proj. Mgr: Angela Baioni

AcctNum / Client ID:

Table #:

Profile / Template: 13861

Prelog / Bottle Ord. ID: EZ 3059947

Additional Instructions from Pace®:

Collected By: (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:
MKW/WSP	2/14/24@1900	GMH Pace HM	2/15/24 1010
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:	L1706887
Samples Received:	02/17/2024
Project Number:	92713248
Description:	Bremo_1SA2024_CCR&VSWMR_P_D
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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021324NMW25S L1706887-01 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/13/24 13:20	02/17/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 903.0/9315	WG2231511	1	02/22/24 15:44	03/02/24 07:22	ASN	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	WG2231511	1	02/22/24 15:44	03/14/24 21:03	SNR	Mt. Juliet, TN

021324NMW25D L1706887-02 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/13/24 14:10	02/17/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 903.0/9315	WG2231511	1	02/22/24 15:44	03/02/24 07:22	ASN	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	WG2231511	1	02/22/24 15:44	03/14/24 21:03	SNR	Mt. Juliet, TN

021324NMW26S L1706887-03 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/13/24 15:35	02/17/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 903.0/9315	WG2231511	1	02/22/24 15:44	03/02/24 08:22	ASN	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	WG2231511	1	02/22/24 15:44	03/14/24 21:03	SNR	Mt. Juliet, TN

021324NMW26D L1706887-04 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/13/24 14:55	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 14:17	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

021324NMW27S L1706887-05 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/13/24 14:50	02/17/24 09:00

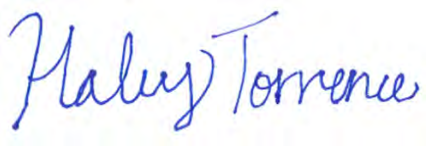
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 903.0/9315	WG2232398	1	02/23/24 16:36	03/01/24 14:17	SNR	Mt. Juliet, TN
Radiochemistry by Method 904/9320	WG2238282	1	03/04/24 22:49	03/14/24 21:03	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2232398	1	02/23/24 16:36	03/14/24 21:03	DDD	Mt. Juliet, TN

021424NMW28 L1706887-06 Non-Potable Water

Collected by	Collected date/time	Received date/time
	02/14/24 14:05	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 14:17	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

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	0.275		0.201		0.258		03/02/2024 07:22	WG2231511
(T) Barium	*103*					*30.0-143*	*03/02/2024 07:22*	WG2231511

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	0.663		0.194	0.953	0.327	0.174	03/14/2024 21:03	WG2238282
(T) Barium	*129*					*30.0-143*	*03/14/2024 21:03*	WG2238282
(T) Yttrium	*118*					*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	0.938		0.279	0.417	03/14/2024 21:03	WG2231511

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	1.40		0.377		0.267		03/02/2024 07:22	WG2231511
(T) Barium	*98.7*					*30.0-143*	*03/02/2024 07:22*	WG2231511

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	0.719		0.282	1.31	0.486	0.258	03/14/2024 21:03	WG2238282
(T) Barium	*131*					*30.0-143*	*03/14/2024 21:03*	WG2238282
(T) Yttrium	*116*					*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	2.12		0.471	0.555	03/14/2024 21:03	WG2231511

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	0.276		0.180		0.199		03/02/2024 08:22	WG2231511
(T) Barium	*102*					*30.0-143*	*03/02/2024 08:22*	WG2231511

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	0.103	U	0.190	2.42	0.343	0.182	03/14/2024 21:03	WG2238282
(T) Barium	*139*					*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	0.379	J	0.262	0.397	03/14/2024 21:03	WG2231511

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	0.241		0.186		0.189		03/01/2024 14:17	WG2232398
(T) Barium	*101*					*30.0-143*	*03/01/2024 14:17*	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	0.297	J	0.279	1.73	0.493	0.257	03/14/2024 21:03	WG2238282
(T) Barium	*133*					*30.0-143*	*03/14/2024 21:03*	WG2238282
(T) Yttrium	*117*					*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	0.538		0.335	0.528	03/14/2024 21:03	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	0.265		0.208		0.241		03/01/2024 14:17	WG2232398
(T) Barium	*102*					*30.0-143*	*03/01/2024 14:17*	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	0.667		0.207	0.980	0.353	0.187	03/14/2024 21:03	WG2238282
(T) Barium	*130*					*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 pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.932		0.293	0.427	03/14/2024 21:03	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	0.287		0.207		0.198		03/01/2024 14:17	WG2232398
(T) Barium	*92.9*					*30.0-143*	*03/01/2024 14:17*	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	0.328	J	0.233	1.49	0.411	0.216	03/14/2024 21:03	WG2238282
(T) Barium	*133*					*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 pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.614		0.312	0.456	03/14/2024 21:03	WG2232398

Method Blank (MB)

(MB) R4042859-1 03/02/24 02:20

Analyte	MB Result	MB Qualifier	MB 2 sigma CE	MB MDA	MB Lc
	pCi/l		+ / -	pCi/l	pCi/l
Radium-226	0.209		0.107	0.124	
(T) Barium	*103*		*103*		

L1706881-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1706881-06 03/02/24 07:22 • (DUP) R4042859-5 03/02/24 03:21

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	1.10	0.328	0.203		1.67	0.575	0.343		41.2	0.861		20	3
(T) Barium	*101*				*104*	*104*							

Laboratory Control Sample (LCS)

(LCS) R4042859-2 03/02/24 02:20

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	pCi/l	pCi/l	%	%	
Radium-226	5.00	5.90	118	80.0-120	
(T) Barium			*103*		

L1705781-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705781-01 03/02/24 04:21 • (MS) R4042859-3 03/02/24 02:20 • (MSD) R4042859-4 03/02/24 02:20

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	0.877	21.5	22.0	103	106	1	75.0-125			2.58		20
(T) Barium		*100*			*92.0*	*99.8*							

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

☐ Rush Multiplier____X
☐ Samples Pre-Logged into eCOC

State Of Origin: VA
Cert. Needed: [X] Yes ☐ No

Workorder: 92713248 **Workorder Name:** Bremo_1SA2024_CCR&VSWMR_P_D **Owner Received Date:** 2/14/2024 **Results Requested By:** 2/28/2024

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	021324NMW25S	PS	2/13/2024 13:20	92713248001	Water	2						X	X											-01
2	021324NMW25D	PS	2/13/2024 14:10	92713248002	Water	2						X	X											-02
3	021324NMW26S	PS	2/13/2024 15:35	92713248003	Water	2						X	X											-03
4	021324NMW26D	PS	2/13/2024 14:55	92713248004	Water	2						X	X											-04
5	021324NMW27S	PS	2/13/2024 14:50	92713248005	Water	2						X	X											-05
6	021424NMW28	PS	2/14/2024 14:05	92713248006	Water	2						X	X											-06

A237
L1706887

Transfers	Released By	Date/Time	Received By	Date/Time
1	AV Pace FAC	2/16/24 1800	M. Jarrett	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.

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		

1.6 to=1.6 TLAS

L1206887

INTER_LABORATORY WORK ORDER # 92713248

(To be completed by sending lab)

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

Sending Project No:	92713248
Receiving Project No:	
Check Box for Consolidated Invoice:	☐
Date Prepared:	02/16/24
REQUESTED COMPLETION DATE:	**2/28/2024**

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	6	SI-38RAD	SUB PASI RAD
Ra228 904.0/Combined Ra	BP1N		HNO3	6	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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Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

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	

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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

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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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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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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_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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Huntersville, NC 28078
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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																													
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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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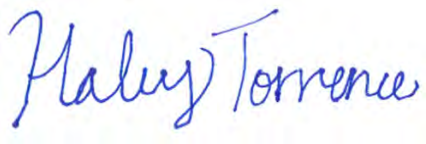
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	Collected by	Collected date/time	Received date/time
021224NFBBLANK L1706897-01 Non-Potable Water		02/12/24 12:40	02/17/24 09:00

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.

APPENDIX E.2
LABORATORY ANALYTICAL RESULTS
FIRST SEMI-ANNUAL VERIFICATION SAMPLING EVENT (APRIL 2024)

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

April 19, 2024

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

RE: Project: Bremo_CCR&VSWMR_Verif_NPond_A
Pace Project No.: 92725173

Dear Kelly Hicks:

Enclosed are the analytical results for sample(s) received by the laboratory on April 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

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.

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CERTIFICATIONS

Project: Bremo_CCR&VSWMR_Verif_NPond_A
Pace Project No.: 92725173

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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Huntersville, NC 28078
(704)875-9092

SAMPLE SUMMARY

Project: Bremo_CCR&VSWMR_Verif_NPond_A
Pace Project No.: 92725173

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92725173001	**041124NMW24**	Water	04/11/24 10:50	04/15/24 12:50
92725173002	**041124NMW25D**	Water	04/11/24 13:15	04/15/24 12:50
92725173003	**041124NFBBLANK**	Water	04/11/24 13:20	04/15/24 12:50

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SAMPLE ANALYTE COUNT

Project: Bremo_CCR&VSWMR_Verif_NPond_A
Pace Project No.: 92725173

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92725173001	**041124NMW24**	EPA 6010D	DBB1	1	PASI-A
92725173002	**041124NMW25D**	EPA 6010D	DBB1	1	PASI-A
92725173003	**041124NFBBLANK**	EPA 6010D	DBB1	2	PASI-A

PASI-A = Pace Analytical Services - Asheville

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(704)875-9092

SUMMARY OF DETECTION

Project: Bremo_CCR&VSWMR_Verif_NPond_A
Pace Project No.: 92725173

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92725173001	**041124NMW24**					
EPA 6010D	Zinc	3.2J	ug/L	10.0	04/17/24 21:38	

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(704)875-9092

PROJECT NARRATIVE

Project: Bremo_CCR&VSWMR_Verif_NPond_A
Pace Project No.: 92725173

Method: **EPA 6010D**
Description: 6010 MET ICP
Client: Dominion Energy_VA
Date: April 19, 2024

General Information:
3 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:

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

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ANALYTICAL RESULTS

Project: Bremo_CCR&VSWMR_Verif_NPond_A
Pace Project No.: 92725173

Sample: 041124NMW24 **Lab ID: 92725173001** Collected: 04/11/24 10:50 Received: 04/15/24 12:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Zinc	**3.2J**	ug/L	10.0	3.0	1	04/17/24 01:08	04/17/24 21:38	7440-66-6	

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ANALYTICAL RESULTS

Project: Bremo_CCR&VSWMR_Verif_NPond_A
Pace Project No.: 92725173

Sample: 041124NMW25D **Lab ID: 92725173002** Collected: 04/11/24 13:15 Received: 04/15/24 12:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Silver	ND	ug/L	5.0	0.49	1	04/17/24 01:08	04/17/24 21:52	7440-22-4	

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ANALYTICAL RESULTS

Project: Bremo_CCR&VSWMR_Verif_NPond_A
Pace Project No.: 92725173

Sample: 041124NFBBLANK **Lab ID: 92725173003** Collected: 04/11/24 13:20 Received: 04/15/24 12:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Silver	ND	ug/L	5.0	0.49	1	04/17/24 01:08	04/17/24 21:55	7440-22-4	
Zinc	ND	ug/L	10.0	3.0	1	04/17/24 01:08	04/17/24 21:55	7440-66-6	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Bremo_CCR&VSWMR_Verif_NPond_A
Pace Project No.: 92725173

QC Batch: 847405
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92725173001, 92725173002, 92725173003

METHOD BLANK: 4375215 Matrix: Water
Associated Lab Samples: 92725173001, 92725173002, 92725173003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Silver	ug/L	ND	5.0	0.49	04/17/24 21:32	
Zinc	ug/L	3.0J	10.0	3.0	04/17/24 21:32	

LABORATORY CONTROL SAMPLE: 4375216

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Silver	ug/L	250	260	104	80-120	
Zinc	ug/L	500	518	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4375217 4375218

Parameter	Units	92725173001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Silver	ug/L	ND	250	250	267	263	107	105	75-125	1	20	
Zinc	ug/L	3.2J	500	500	502	496	100	98	75-125	1	20	

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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(704)875-9092

QUALIFIERS

Project: Bremo_CCR&VSWMR_Verif_NPond_A
Pace Project No.: 92725173

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.

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Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Bremo_CCR&VSWMR_Verif_NPond_A
Pace Project No.: 92725173

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92725173001	**041124NMW24**	EPA 3010A	847405	EPA 6010D	847425
92725173002	**041124NMW25D**	EPA 3010A	847405	EPA 6010D	847425
92725173003	**041124NFBBLANK**	EPA 3010A	847405	EPA 6010D	847425

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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 Emery - VA

Project #: WO# : 92725173

92725173

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

Carrier Tracking Number: 779920022774

Custody Seal Present? ☑ Yes ☐ No Seals Intact? ☑ Yes ☐ No Date/Initials Person Examining Contents: APC 4-15-24

Packing Material: ☑ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☑ IR Gun ID: 92-1070 Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp (°C): 3.7 Correction Factor: Add / Subtract (°C) 0.0

Corrected Cooler Temp (°C): 3.7

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: 1250	Temp: 3.7
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

Page 1 of 2

*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#: 92725173**

PM: AMB Due Date: 04/22/24

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						✓																							
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_CCR&VSWMR_Verif_NPond_GrpA	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 **: 3 3 3

Identify Container Preservative Type***: 2 2 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	6010 Metals - Silver Only	6010 Metals - Zinc & Silver Only	6010 Metals - Zinc Only	Sample Comment
04_11_24NMW24	WT	G			04/11/2024	1050	1					X	*All Samples
04_11_24NMW25D	WT	G			04/11/2024	1315	1			X			Preserved on ICE
04_11_24NFBBLANK	WT	G			04/11/2024	1320	1				X		

**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 3094655

Preservation non-conformance identified for sample:

Additional Instructions from Pace®:
COC ID: Bremo_CCR+VSWMR_Verif_NPond_GrpA_1_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:
1	927070	0.0	3.7	3.7	Y

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Tracking Number:
WSP	04/11/2024 1554	AMLPaceCHR	4-19-24 1250	7759 2002 2774
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/

APPENDIX E.3
LABORATORY ANALYTICAL RESULTS
SECOND SEMI-ANNUAL GROUNDWATER MONITORING EVENT
(AUGUST 2024)

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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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

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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

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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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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	

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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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(704)875-9092

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:

REPORT OF LABORATORY ANALYSIS

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

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:

REPORT OF LABORATORY ANALYSIS

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Huntersville, NC 28078
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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	

REPORT OF LABORATORY ANALYSIS

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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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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

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_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

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_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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9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

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

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:	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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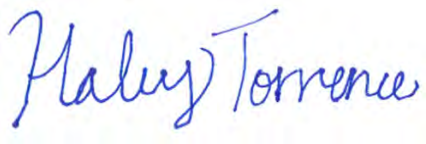
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	Collected by	Collected date/time	Received date/time
082624NMW11 L1773939-01 Non-Potable Water		08/26/24 12:05	09/04/24 09:00

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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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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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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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

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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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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:

REPORT OF LABORATORY ANALYSIS

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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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Huntersville, NC 28078
(704)875-9092

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

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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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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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REPORT OF LABORATORY ANALYSIS

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

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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Huntersville, NC 28078
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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

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_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																														
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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

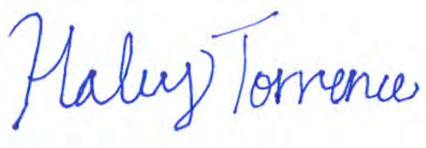
082624NMW29D L1773940-02 Non-Potable Water

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

September 22, 2024

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

RE: Project: Bremo_2SA2024_CCR&VSWMR_C
Pace Project No.: 92750043

Dear Kelly Hicks:

Enclosed are the analytical results for sample(s) received by the laboratory on August 28, 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_C
Pace Project No.: 92750043

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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Huntersville, NC 28078
(704)875-9092

SAMPLE SUMMARY

Project: Bremo_2SA2024_CCR&VSWMR_C
Pace Project No.: 92750043

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92750043001	**082724NMW24**	Water	08/27/24 12:25	08/28/24 10:09
92750043002	**082724NMW27D**	Water	08/27/24 13:50	08/28/24 10:09
92750043003	**082724NMW33**	Water	08/27/24 15:10	08/28/24 10:09
92750043004	**082724NMW34**	Water	08/27/24 16:25	08/28/24 10:09
92750043005	**082724NMW35**	Water	08/27/24 12:35	08/28/24 10:09
92750043006	**082724NNPFDDUPLICATE**	Water	08/27/24 12:30	08/28/24 10:09

REPORT OF LABORATORY ANALYSIS

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(704)875-9092

SAMPLE ANALYTE COUNT

Project: Bremo_2SA2024_CCR&VSWMR_C
Pace Project No.: 92750043

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92750043001	**082724NMW24**	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
92750043002	**082724NMW27D**	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
92750043003	**082724NMW33**	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
92750043004	**082724NMW34**	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
92750043005	**082724NMW35**	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
92750043006	**082724NNPFDDUPLICATE**	EPA 7199	SMS1	1	PASI-C
		EPA 6010D	DBB1	16	PASI-A

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Huntersville, NC 28078
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SAMPLE ANALYTE COUNT

Project: Bremo_2SA2024_CCR&VSWMR_C
Pace Project No.: 92750043

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		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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Huntersville, NC 28078
(704)875-9092

SUMMARY OF DETECTION

Project: Bremo_2SA2024_CCR&VSWMR_C
Pace Project No.: 92750043

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92750043001	**082724NMW24**					
EPA 6010D	Barium	75.1	ug/L	5.0	09/05/24 03:01	
EPA 6010D	Boron	209	ug/L	50.0	09/05/24 03:01	
EPA 6010D	Calcium	70300	ug/L	100	09/05/24 03:01	
EPA 6010D	Copper	0.65J	ug/L	5.0	09/05/24 03:01	
EPA 6010D	Molybdenum	6.5	ug/L	5.0	09/05/24 03:01	
EPA 6010D	Hardness, Total(SM 2340B)	220000	ug/L	662	09/05/24 03:01	
EPA 6020B	Cobalt	47.3	ug/L	1.0	09/04/24 00:09	
EPA 6020B	Iron	6090	ug/L	20.0	09/04/24 00:09	
EPA 6020B	Lithium	2.7	ug/L	2.5	09/04/24 00:09	
EPA 6020B	Manganese	3210	ug/L	60.0	09/04/24 21:07	
SM 2540C-2015	Total Dissolved Solids	347	mg/L	25.0	08/30/24 15:22	
EPA 350.1 Rev 2.0 1993	Nitrogen, Ammonia	0.46	mg/L	0.10	09/09/24 17:59	
EPA 9056A	Chloride	18.7	mg/L	1.0	08/29/24 08:26	
EPA 9056A	Sulfate	39.5	mg/L	1.0	08/29/24 08:26	
92750043002	**082724NMW27D**					
EPA 7199	Chromium, Hexavalent	0.23	ug/L	0.050	08/29/24 00:06	H1,M1
EPA 6010D	Barium	18.1	ug/L	5.0	09/09/24 14:14	
EPA 6010D	Boron	1350	ug/L	50.0	09/09/24 14:14	
EPA 6010D	Calcium	65000	ug/L	100	09/09/24 14:14	
EPA 6010D	Nickel	1.7J	ug/L	5.0	09/09/24 14:14	
EPA 6010D	Silver	0.74J	ug/L	5.0	09/09/24 14:14	
EPA 6010D	Hardness, Total(SM 2340B)	286000	ug/L	662	09/09/24 14:14	
EPA 6010D	Zinc	5.2J	ug/L	10.0	09/09/24 14:14	
EPA 6020B	Iron	261	ug/L	20.0	09/04/24 00:13	
EPA 6020B	Lithium	30.0	ug/L	2.5	09/04/24 00:13	
EPA 6020B	Manganese	62.5	ug/L	2.0	09/04/24 00:13	
SM 2540C-2015	Total Dissolved Solids	694	mg/L	25.0	08/30/24 15:23	
EPA 9056A	Chloride	11.7	mg/L	1.0	08/29/24 09:26	
EPA 9056A	Fluoride	0.10	mg/L	0.10	08/29/24 09:26	
EPA 9056A	Nitrate as N	0.083J	mg/L	0.10	08/29/24 09:26	
EPA 9056A	Sulfate	186	mg/L	4.0	08/29/24 11:40	M1
92750043003	**082724NMW33**					
EPA 7199	Chromium, Hexavalent	0.087	ug/L	0.025	08/28/24 20:02	H1
EPA 6010D	Barium	16.4	ug/L	5.0	09/05/24 03:04	
EPA 6010D	Boron	273	ug/L	50.0	09/05/24 03:04	
EPA 6010D	Calcium	78200	ug/L	100	09/05/24 03:04	
EPA 6010D	Copper	1.4J	ug/L	5.0	09/05/24 03:04	
EPA 6010D	Nickel	1.0J	ug/L	5.0	09/05/24 03:04	
EPA 6010D	Hardness, Total(SM 2340B)	256000	ug/L	662	09/05/24 03:04	
EPA 6010D	Vanadium	2.3J	ug/L	5.0	09/05/24 03:04	
EPA 6010D	Zinc	18.9	ug/L	10.0	09/05/24 03:04	
EPA 6020B	Iron	51.8	ug/L	20.0	09/04/24 00:39	
EPA 6020B	Lithium	3.8	ug/L	2.5	09/04/24 00:39	
EPA 6020B	Manganese	12.0	ug/L	2.0	09/04/24 00:39	
EPA 6020B	Tin	0.25J	ug/L	1.0	09/04/24 00:39	
SM 2540C-2015	Total Dissolved Solids	328	mg/L	25.0	08/30/24 15:24	

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_2SA2024_CCR&VSWMR_C
Pace Project No.: 92750043

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92750043003	**082724NMW33**					
EPA 9056A	Chloride	12.8	mg/L	1.0	08/29/24 10:10	
EPA 9056A	Fluoride	0.065J	mg/L	0.10	08/29/24 10:10	
EPA 9056A	Nitrate as N	0.15	mg/L	0.10	08/29/24 10:10	
EPA 9056A	Sulfate	31.7	mg/L	1.0	08/29/24 10:10	
92750043004	**082724NMW34**					
EPA 7199	Chromium, Hexavalent	0.48	ug/L	0.050	08/29/24 01:16	H1
EPA 6010D	Barium	42.0	ug/L	5.0	09/05/24 03:12	
EPA 6010D	Boron	1380	ug/L	50.0	09/05/24 03:12	
EPA 6010D	Calcium	38200	ug/L	100	09/05/24 03:12	
EPA 6010D	Chromium	0.76J	ug/L	5.0	09/05/24 03:12	
EPA 6010D	Silver	0.51J	ug/L	5.0	09/05/24 03:12	
EPA 6010D	Hardness, Total(SM 2340B)	150000	ug/L	662	09/05/24 03:12	
EPA 6020B	Iron	15.5J	ug/L	20.0	09/04/24 00:43	
EPA 6020B	Lithium	7.2	ug/L	2.5	09/04/24 00:43	
EPA 6020B	Manganese	4.5	ug/L	2.0	09/04/24 00:43	
EPA 7470A	Mercury	0.17J	ug/L	0.20	09/12/24 12:30	
SM 2540C-2015	Total Dissolved Solids	263	mg/L	25.0	08/30/24 15:24	
EPA 9056A	Chloride	12.6	mg/L	1.0	08/29/24 11:25	
EPA 9056A	Sulfate	35.9	mg/L	1.0	08/29/24 11:25	
92750043005	**082724NMW35**					
EPA 6010D	Arsenic	2.5J	ug/L	10.0	09/05/24 03:15	
EPA 6010D	Barium	80.6	ug/L	5.0	09/05/24 03:15	
EPA 6010D	Boron	615	ug/L	50.0	09/05/24 03:15	
EPA 6010D	Calcium	54100	ug/L	100	09/05/24 03:15	
EPA 6010D	Chromium	1.8J	ug/L	5.0	09/05/24 03:15	
EPA 6010D	Hardness, Total(SM 2340B)	177000	ug/L	662	09/05/24 03:15	
EPA 6020B	Cobalt	0.44J	ug/L	1.0	09/04/24 00:47	
EPA 6020B	Iron	2240	ug/L	20.0	09/04/24 00:47	
EPA 6020B	Lithium	18.3	ug/L	2.5	09/04/24 00:47	
EPA 6020B	Manganese	652	ug/L	10.0	09/04/24 22:04	
SM 2540C-2015	Total Dissolved Solids	295	mg/L	25.0	08/30/24 15:24	
EPA 9056A	Chloride	9.9	mg/L	1.0	08/29/24 08:56	
EPA 9056A	Sulfate	35.1	mg/L	1.0	08/29/24 08:56	
92750043006	**082724NNPFDDUPLICATE**					
EPA 6010D	Barium	74.0	ug/L	5.0	09/05/24 03:18	
EPA 6010D	Boron	229	ug/L	50.0	09/05/24 03:18	
EPA 6010D	Calcium	69700	ug/L	100	09/05/24 03:18	
EPA 6010D	Molybdenum	7.6	ug/L	5.0	09/05/24 03:18	
EPA 6010D	Hardness, Total(SM 2340B)	223000	ug/L	662	09/05/24 03:18	
EPA 6020B	Cobalt	50.0	ug/L	1.0	09/04/24 00:51	
EPA 6020B	Iron	6170	ug/L	20.0	09/04/24 00:51	
EPA 6020B	Lithium	2.7	ug/L	2.5	09/04/24 00:51	
EPA 6020B	Manganese	3230	ug/L	60.0	09/04/24 22:08	
SM 2540C-2015	Total Dissolved Solids	347	mg/L	25.0	08/30/24 15:25	
EPA 350.1 Rev 2.0 1993	Nitrogen, Ammonia	0.47	mg/L	0.10	09/09/24 18:09	
EPA 9056A	Chloride	18.4	mg/L	1.0	08/29/24 08:41	

REPORT OF LABORATORY ANALYSIS

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(704)875-9092

SUMMARY OF DETECTION

Project: Bremo_2SA2024_CCR&VSWMR_C
Pace Project No.: 92750043

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92750043006	**082724NNPFDDUPLICATE**					
EPA 9056A	Sulfate	39.2	mg/L	1.0	08/29/24 08:41	

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PROJECT NARRATIVE

Project: Bremo_2SA2024_CCR&VSWMR_C
Pace Project No.: 92750043

Method: **EPA 7199**
Description: 7199 Chromium, Hexavalent
Client: Dominion Energy_VA
Date: September 22, 2024

General Information:
6 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.
- 082724NMW24 (Lab ID: 92750043001)
- 082724NMW27D (Lab ID: 92750043002)
- 082724NMW33 (Lab ID: 92750043003)
- 082724NMW34 (Lab ID: 92750043004)
- 082724NMW35 (Lab ID: 92750043005)
- 082724NNPFDDUPLICATE (Lab ID: 92750043006)

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

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

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: Bremo_2SA2024_CCR&VSWMR_C
Pace Project No.: 92750043

Method: **EPA 6010D**
Description: 6010 MET ICP
Client: Dominion Energy_VA
Date: September 22, 2024

General Information:
6 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_C
Pace Project No.: 92750043

Method: **EPA 6020B**
Description: 6020 MET ICPMS
Client: Dominion Energy_VA
Date: September 22, 2024

General Information:
6 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_C
Pace Project No.: 92750043

Method: **EPA 7470A**
Description: 7470 Mercury
Client: Dominion Energy_VA
Date: September 22, 2024

General Information:
6 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_C
Pace Project No.: 92750043

Method: **SM 2540C-2015**
Description: 2540C Total Dissolved Solids
Client: Dominion Energy_VA
Date: September 22, 2024

General Information:
6 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_C
Pace Project No.: 92750043

Method: **EPA 350.1 Rev 2.0 1993**
Description: 350.1 Ammonia
Client: Dominion Energy_VA
Date: September 22, 2024

General Information:
6 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_2SA2024_CCR&VSWMR_C
Pace Project No.: 92750043

Method: **EPA 9056A**
Description: 9056 IC Anions 48hr
Client: Dominion Energy_VA
Date: September 22, 2024

General Information:
6 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: 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

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_C
Pace Project No.: 92750043

Sample: 082724NMW24 **Lab ID: 92750043001** Collected: 08/27/24 12:25 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 18:51	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 03:01	7440-36-0	
Arsenic	ND	ug/L	10.0	2.5	1	08/30/24 12:05	09/05/24 03:01	7440-38-2	
Barium	**75.1**	ug/L	5.0	0.79	1	08/30/24 12:05	09/05/24 03:01	7440-39-3	
Beryllium	ND	ug/L	1.0	0.16	1	08/30/24 12:05	09/05/24 03:01	7440-41-7	
Boron	**209**	ug/L	50.0	4.0	1	08/30/24 12:05	09/05/24 03:01	7440-42-8	
Cadmium	ND	ug/L	1.0	0.29	1	08/30/24 12:05	09/05/24 03:01	7440-43-9	
Calcium	**70300**	ug/L	100	14.7	1	08/30/24 12:05	09/05/24 03:01	7440-70-2	
Chromium	ND	ug/L	5.0	0.63	1	08/30/24 12:05	09/05/24 03:01	7440-47-3	
Copper	**0.65J**	ug/L	5.0	0.62	1	08/30/24 12:05	09/05/24 03:01	7440-50-8	
Molybdenum	**6.5**	ug/L	5.0	2.6	1	08/30/24 12:05	09/05/24 03:01	7439-98-7	
Nickel	ND	ug/L	5.0	0.88	1	08/30/24 12:05	09/05/24 03:01	7440-02-0	
Selenium	ND	ug/L	10.0	4.1	1	08/30/24 12:05	09/05/24 03:01	7782-49-2	
Silver	ND	ug/L	5.0	0.49	1	08/30/24 12:05	09/05/24 03:01	7440-22-4	
Hardness, Total(SM 2340B)	**220000**	ug/L	662	36.8	1	08/30/24 12:05	09/05/24 03:01		
Vanadium	ND	ug/L	5.0	1.6	1	08/30/24 12:05	09/05/24 03:01	7440-62-2	
Zinc	ND	ug/L	10.0	3.0	1	08/30/24 12:05	09/05/24 03:01	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Cobalt	**47.3**	ug/L	1.0	0.14	1	08/30/24 12:00	09/04/24 00:09	7440-48-4	
Iron	**6090**	ug/L	20.0	3.0	1	08/30/24 12:00	09/04/24 00:09	7439-89-6	
Lead	ND	ug/L	1.0	0.18	1	08/30/24 12:00	09/04/24 00:09	7439-92-1	
Lithium	**2.7**	ug/L	2.5	0.33	1	08/30/24 12:00	09/04/24 00:09	7439-93-2	
Manganese	**3210**	ug/L	60.0	7.1	30	08/30/24 12:00	09/04/24 21:07	7439-96-5	
Thallium	ND	ug/L	0.20	0.028	1	08/30/24 12:00	09/04/24 00:09	7440-28-0	
Tin	ND	ug/L	1.0	0.14	1	08/30/24 12:00	09/04/24 00:09	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 11:21	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**347**	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	**0.46**	mg/L	0.10	0.031	1		09/09/24 17:59	7664-41-7	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Bremo_2SA2024_CCR&VSWMR_C
Pace Project No.: 92750043

Sample: 082724NMW24 **Lab ID: 92750043001** Collected: 08/27/24 12:25 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	**18.7**	mg/L	1.0	0.60	1		08/29/24 08:26	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/29/24 08:26	16984-48-8	
Nitrate as N	ND	mg/L	0.10	0.060	1		08/29/24 08:26	14797-55-8	
Sulfate	**39.5**	mg/L	1.0	0.50	1		08/29/24 08:26	14808-79-8	

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(704)875-9092

ANALYTICAL RESULTS

Project: Bremo_2SA2024_CCR&VSWMR_C
Pace Project No.: 92750043

Sample: 082724NMW27D **Lab ID: 92750043002** Collected: 08/27/24 13:50 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	**0.23**	ug/L	0.050	0.0086	2		08/29/24 00:06	18540-29-9	H1,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	09/05/24 11:50	09/09/24 14:14	7440-36-0	
Arsenic	ND	ug/L	10.0	2.5	1	09/05/24 11:50	09/09/24 14:14	7440-38-2	
Barium	**18.1**	ug/L	5.0	0.79	1	09/05/24 11:50	09/09/24 14:14	7440-39-3	
Beryllium	ND	ug/L	1.0	0.16	1	09/05/24 11:50	09/09/24 14:14	7440-41-7	
Boron	**1350**	ug/L	50.0	4.0	1	09/05/24 11:50	09/09/24 14:14	7440-42-8	
Cadmium	ND	ug/L	1.0	0.29	1	09/05/24 11:50	09/09/24 14:14	7440-43-9	
Calcium	**65000**	ug/L	100	14.7	1	09/05/24 11:50	09/09/24 14:14	7440-70-2	
Chromium	ND	ug/L	5.0	0.63	1	09/05/24 11:50	09/09/24 14:14	7440-47-3	
Copper	ND	ug/L	5.0	0.62	1	09/05/24 11:50	09/09/24 14:14	7440-50-8	
Molybdenum	ND	ug/L	5.0	2.6	1	09/05/24 11:50	09/09/24 14:14	7439-98-7	
Nickel	**1.7J**	ug/L	5.0	0.88	1	09/05/24 11:50	09/09/24 14:14	7440-02-0	
Selenium	ND	ug/L	10.0	4.1	1	09/05/24 11:50	09/09/24 14:14	7782-49-2	
Silver	**0.74J**	ug/L	5.0	0.49	1	09/05/24 11:50	09/09/24 14:14	7440-22-4	
Hardness, Total(SM 2340B)	**286000**	ug/L	662	36.8	1	09/05/24 11:50	09/09/24 14:14		
Vanadium	ND	ug/L	5.0	1.6	1	09/05/24 11:50	09/09/24 14:14	7440-62-2	
Zinc	**5.2J**	ug/L	10.0	3.0	1	09/05/24 11:50	09/09/24 14:14	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	08/30/24 12:00	09/04/24 00:13	7440-48-4	
Iron	**261**	ug/L	20.0	3.0	1	08/30/24 12:00	09/04/24 00:13	7439-89-6	
Lead	ND	ug/L	1.0	0.18	1	08/30/24 12:00	09/04/24 00:13	7439-92-1	
Lithium	**30.0**	ug/L	2.5	0.33	1	08/30/24 12:00	09/04/24 00:13	7439-93-2	
Manganese	**62.5**	ug/L	2.0	0.24	1	08/30/24 12:00	09/04/24 00:13	7439-96-5	
Thallium	ND	ug/L	0.20	0.028	1	08/30/24 12:00	09/04/24 00:13	7440-28-0	
Tin	ND	ug/L	1.0	0.14	1	08/30/24 12:00	09/04/24 00:13	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 11:23	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**694**	mg/L	25.0	25.0	1		08/30/24 15:23		
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		09/09/24 18:00	7664-41-7	

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ANALYTICAL RESULTS

Project: Bremo_2SA2024_CCR&VSWMR_C
Pace Project No.: 92750043

Sample: 082724NMW27D **Lab ID: 92750043002** Collected: 08/27/24 13:50 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	**11.7**	mg/L	1.0	0.60	1		08/29/24 09:26	16887-00-6	
Fluoride	**0.10**	mg/L	0.10	0.050	1		08/29/24 09:26	16984-48-8	
Nitrate as N	**0.083J**	mg/L	0.10	0.060	1		08/29/24 09:26	14797-55-8	
Sulfate	**186**	mg/L	4.0	2.0	4		08/29/24 11:40	14808-79-8	M1

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ANALYTICAL RESULTS

Project: Bremo_2SA2024_CCR&VSWMR_C
Pace Project No.: 92750043

Sample: 082724NMW33 **Lab ID: 92750043003** Collected: 08/27/24 15:10 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	**0.087**	ug/L	0.025	0.0043	1		08/28/24 20:02	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 03:04	7440-36-0	
Arsenic	ND	ug/L	10.0	2.5	1	08/30/24 12:05	09/05/24 03:04	7440-38-2	
Barium	**16.4**	ug/L	5.0	0.79	1	08/30/24 12:05	09/05/24 03:04	7440-39-3	
Beryllium	ND	ug/L	1.0	0.16	1	08/30/24 12:05	09/05/24 03:04	7440-41-7	
Boron	**273**	ug/L	50.0	4.0	1	08/30/24 12:05	09/05/24 03:04	7440-42-8	
Cadmium	ND	ug/L	1.0	0.29	1	08/30/24 12:05	09/05/24 03:04	7440-43-9	
Calcium	**78200**	ug/L	100	14.7	1	08/30/24 12:05	09/05/24 03:04	7440-70-2	
Chromium	ND	ug/L	5.0	0.63	1	08/30/24 12:05	09/05/24 03:04	7440-47-3	
Copper	**1.4J**	ug/L	5.0	0.62	1	08/30/24 12:05	09/05/24 03:04	7440-50-8	
Molybdenum	ND	ug/L	5.0	2.6	1	08/30/24 12:05	09/05/24 03:04	7439-98-7	
Nickel	**1.0J**	ug/L	5.0	0.88	1	08/30/24 12:05	09/05/24 03:04	7440-02-0	
Selenium	ND	ug/L	10.0	4.1	1	08/30/24 12:05	09/05/24 03:04	7782-49-2	
Silver	ND	ug/L	5.0	0.49	1	08/30/24 12:05	09/05/24 03:04	7440-22-4	
Hardness, Total(SM 2340B)	**256000**	ug/L	662	36.8	1	08/30/24 12:05	09/05/24 03:04		
Vanadium	**2.3J**	ug/L	5.0	1.6	1	08/30/24 12:05	09/05/24 03:04	7440-62-2	
Zinc	**18.9**	ug/L	10.0	3.0	1	08/30/24 12:05	09/05/24 03:04	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	08/30/24 12:00	09/04/24 00:39	7440-48-4	
Iron	**51.8**	ug/L	20.0	3.0	1	08/30/24 12:00	09/04/24 00:39	7439-89-6	
Lead	ND	ug/L	1.0	0.18	1	08/30/24 12:00	09/04/24 00:39	7439-92-1	
Lithium	**3.8**	ug/L	2.5	0.33	1	08/30/24 12:00	09/04/24 00:39	7439-93-2	
Manganese	**12.0**	ug/L	2.0	0.24	1	08/30/24 12:00	09/04/24 00:39	7439-96-5	
Thallium	ND	ug/L	0.20	0.028	1	08/30/24 12:00	09/04/24 00:39	7440-28-0	
Tin	**0.25J**	ug/L	1.0	0.14	1	08/30/24 12:00	09/04/24 00:39	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	09/05/24 19:56	09/12/24 11:29	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**328**	mg/L	25.0	25.0	1		08/30/24 15:24		
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		09/09/24 18:04	7664-41-7	

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ANALYTICAL RESULTS

Project: Bremo_2SA2024_CCR&VSWMR_C
Pace Project No.: 92750043

Sample: 082724NMW33 **Lab ID: 92750043003** Collected: 08/27/24 15:10 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	**12.8**	mg/L	1.0	0.60	1		08/29/24 10:10	16887-00-6	
Fluoride	**0.065J**	mg/L	0.10	0.050	1		08/29/24 10:10	16984-48-8	
Nitrate as N	**0.15**	mg/L	0.10	0.060	1		08/29/24 10:10	14797-55-8	
Sulfate	**31.7**	mg/L	1.0	0.50	1		08/29/24 10:10	14808-79-8	

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ANALYTICAL RESULTS

Project: Bremo_2SA2024_CCR&VSWMR_C
Pace Project No.: 92750043

Sample: 082724NMW34 **Lab ID: 92750043004** Collected: 08/27/24 16:25 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	**0.48**	ug/L	0.050	0.0086	2		08/29/24 01:16	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 03:12	7440-36-0	
Arsenic	ND	ug/L	10.0	2.5	1	08/30/24 12:05	09/05/24 03:12	7440-38-2	
Barium	**42.0**	ug/L	5.0	0.79	1	08/30/24 12:05	09/05/24 03:12	7440-39-3	
Beryllium	ND	ug/L	1.0	0.16	1	08/30/24 12:05	09/05/24 03:12	7440-41-7	
Boron	**1380**	ug/L	50.0	4.0	1	08/30/24 12:05	09/05/24 03:12	7440-42-8	
Cadmium	ND	ug/L	1.0	0.29	1	08/30/24 12:05	09/05/24 03:12	7440-43-9	
Calcium	**38200**	ug/L	100	14.7	1	08/30/24 12:05	09/05/24 03:12	7440-70-2	
Chromium	**0.76J**	ug/L	5.0	0.63	1	08/30/24 12:05	09/05/24 03:12	7440-47-3	
Copper	ND	ug/L	5.0	0.62	1	08/30/24 12:05	09/05/24 03:12	7440-50-8	
Molybdenum	ND	ug/L	5.0	2.6	1	08/30/24 12:05	09/05/24 03:12	7439-98-7	
Nickel	ND	ug/L	5.0	0.88	1	08/30/24 12:05	09/05/24 03:12	7440-02-0	
Selenium	ND	ug/L	10.0	4.1	1	08/30/24 12:05	09/05/24 03:12	7782-49-2	
Silver	**0.51J**	ug/L	5.0	0.49	1	08/30/24 12:05	09/05/24 03:12	7440-22-4	
Hardness, Total(SM 2340B)	**150000**	ug/L	662	36.8	1	08/30/24 12:05	09/05/24 03:12		
Vanadium	ND	ug/L	5.0	1.6	1	08/30/24 12:05	09/05/24 03:12	7440-62-2	
Zinc	ND	ug/L	10.0	3.0	1	08/30/24 12:05	09/05/24 03:12	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	08/30/24 12:00	09/04/24 00:43	7440-48-4	
Iron	**15.5J**	ug/L	20.0	3.0	1	08/30/24 12:00	09/04/24 00:43	7439-89-6	
Lead	ND	ug/L	1.0	0.18	1	08/30/24 12:00	09/04/24 00:43	7439-92-1	
Lithium	**7.2**	ug/L	2.5	0.33	1	08/30/24 12:00	09/04/24 00:43	7439-93-2	
Manganese	**4.5**	ug/L	2.0	0.24	1	08/30/24 12:00	09/04/24 00:43	7439-96-5	
Thallium	ND	ug/L	0.20	0.028	1	08/30/24 12:00	09/04/24 00:43	7440-28-0	
Tin	ND	ug/L	1.0	0.14	1	08/30/24 12:00	09/04/24 00:43	7440-31-5	
7470 Mercury	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Pace Analytical Services - Asheville								
Mercury	**0.17J**	ug/L	0.20	0.12	1	09/06/24 14:00	09/12/24 12:30	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**263**	mg/L	25.0	25.0	1		08/30/24 15:24		
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		09/09/24 18:06	7664-41-7	

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ANALYTICAL RESULTS

Project: Bremo_2SA2024_CCR&VSWMR_C
Pace Project No.: 92750043

Sample: 082724NMW34 **Lab ID: 92750043004** Collected: 08/27/24 16:25 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	**12.6**	mg/L	1.0	0.60	1		08/29/24 11:25	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/29/24 11:25	16984-48-8	
Nitrate as N	ND	mg/L	0.10	0.060	1		08/29/24 11:25	14797-55-8	
Sulfate	**35.9**	mg/L	1.0	0.50	1		08/29/24 11:25	14808-79-8	

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ANALYTICAL RESULTS

Project: Bremo_2SA2024_CCR&VSWMR_C
Pace Project No.: 92750043

Sample: 082724NMW35 **Lab ID: 92750043005** Collected: 08/27/24 12:35 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 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	08/30/24 12:05	09/05/24 03:15	7440-36-0	
Arsenic	**2.5J**	ug/L	10.0	2.5	1	08/30/24 12:05	09/05/24 03:15	7440-38-2	
Barium	**80.6**	ug/L	5.0	0.79	1	08/30/24 12:05	09/05/24 03:15	7440-39-3	
Beryllium	ND	ug/L	1.0	0.16	1	08/30/24 12:05	09/05/24 03:15	7440-41-7	
Boron	**615**	ug/L	50.0	4.0	1	08/30/24 12:05	09/05/24 03:15	7440-42-8	
Cadmium	ND	ug/L	1.0	0.29	1	08/30/24 12:05	09/05/24 03:15	7440-43-9	
Calcium	**54100**	ug/L	100	14.7	1	08/30/24 12:05	09/05/24 03:15	7440-70-2	
Chromium	**1.8J**	ug/L	5.0	0.63	1	08/30/24 12:05	09/05/24 03:15	7440-47-3	
Copper	ND	ug/L	5.0	0.62	1	08/30/24 12:05	09/05/24 03:15	7440-50-8	
Molybdenum	ND	ug/L	5.0	2.6	1	08/30/24 12:05	09/05/24 03:15	7439-98-7	
Nickel	ND	ug/L	5.0	0.88	1	08/30/24 12:05	09/05/24 03:15	7440-02-0	
Selenium	ND	ug/L	10.0	4.1	1	08/30/24 12:05	09/05/24 03:15	7782-49-2	
Silver	ND	ug/L	5.0	0.49	1	08/30/24 12:05	09/05/24 03:15	7440-22-4	
Hardness, Total(SM 2340B)	**177000**	ug/L	662	36.8	1	08/30/24 12:05	09/05/24 03:15		
Vanadium	ND	ug/L	5.0	1.6	1	08/30/24 12:05	09/05/24 03:15	7440-62-2	
Zinc	ND	ug/L	10.0	3.0	1	08/30/24 12:05	09/05/24 03:15	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Cobalt	**0.44J**	ug/L	1.0	0.14	1	08/30/24 12:00	09/04/24 00:47	7440-48-4	
Iron	**2240**	ug/L	20.0	3.0	1	08/30/24 12:00	09/04/24 00:47	7439-89-6	
Lead	ND	ug/L	1.0	0.18	1	08/30/24 12:00	09/04/24 00:47	7439-92-1	
Lithium	**18.3**	ug/L	2.5	0.33	1	08/30/24 12:00	09/04/24 00:47	7439-93-2	
Manganese	**652**	ug/L	10.0	1.2	5	08/30/24 12:00	09/04/24 22:04	7439-96-5	
Thallium	ND	ug/L	0.20	0.028	1	08/30/24 12:00	09/04/24 00:47	7440-28-0	
Tin	ND	ug/L	1.0	0.14	1	08/30/24 12:00	09/04/24 00:47	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	09/06/24 14:00	09/12/24 12:32	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**295**	mg/L	25.0	25.0	1		08/30/24 15:24		
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		09/09/24 18:07	7664-41-7	

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ANALYTICAL RESULTS

Project: Bremo_2SA2024_CCR&VSWMR_C
Pace Project No.: 92750043

Sample: 082724NMW35 **Lab ID: 92750043005** Collected: 08/27/24 12:35 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	**9.9**	mg/L	1.0	0.60	1		08/29/24 08:56	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/29/24 08:56	16984-48-8	
Nitrate as N	ND	mg/L	0.10	0.060	1		08/29/24 08:56	14797-55-8	
Sulfate	**35.1**	mg/L	1.0	0.50	1		08/29/24 08:56	14808-79-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Bremo_2SA2024_CCR&VSWMR_C
Pace Project No.: 92750043

Sample: 082724NNPFDDUPLICATE **Lab ID: 92750043006** Collected: 08/27/24 12:30 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 19:09	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 03:18	7440-36-0	
Arsenic	ND	ug/L	10.0	2.5	1	08/30/24 12:05	09/05/24 03:18	7440-38-2	
Barium	**74.0**	ug/L	5.0	0.79	1	08/30/24 12:05	09/05/24 03:18	7440-39-3	
Beryllium	ND	ug/L	1.0	0.16	1	08/30/24 12:05	09/05/24 03:18	7440-41-7	
Boron	**229**	ug/L	50.0	4.0	1	08/30/24 12:05	09/05/24 03:18	7440-42-8	
Cadmium	ND	ug/L	1.0	0.29	1	08/30/24 12:05	09/05/24 03:18	7440-43-9	
Calcium	**69700**	ug/L	100	14.7	1	08/30/24 12:05	09/05/24 03:18	7440-70-2	
Chromium	ND	ug/L	5.0	0.63	1	08/30/24 12:05	09/05/24 03:18	7440-47-3	
Copper	ND	ug/L	5.0	0.62	1	08/30/24 12:05	09/05/24 03:18	7440-50-8	
Molybdenum	**7.6**	ug/L	5.0	2.6	1	08/30/24 12:05	09/05/24 03:18	7439-98-7	
Nickel	ND	ug/L	5.0	0.88	1	08/30/24 12:05	09/05/24 03:18	7440-02-0	
Selenium	ND	ug/L	10.0	4.1	1	08/30/24 12:05	09/05/24 03:18	7782-49-2	
Silver	ND	ug/L	5.0	0.49	1	08/30/24 12:05	09/05/24 03:18	7440-22-4	
Hardness, Total(SM 2340B)	**223000**	ug/L	662	36.8	1	08/30/24 12:05	09/05/24 03:18		
Vanadium	ND	ug/L	5.0	1.6	1	08/30/24 12:05	09/05/24 03:18	7440-62-2	
Zinc	ND	ug/L	10.0	3.0	1	08/30/24 12:05	09/05/24 03:18	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Cobalt	**50.0**	ug/L	1.0	0.14	1	08/30/24 12:00	09/04/24 00:51	7440-48-4	
Iron	**6170**	ug/L	20.0	3.0	1	08/30/24 12:00	09/04/24 00:51	7439-89-6	
Lead	ND	ug/L	1.0	0.18	1	08/30/24 12:00	09/04/24 00:51	7439-92-1	
Lithium	**2.7**	ug/L	2.5	0.33	1	08/30/24 12:00	09/04/24 00:51	7439-93-2	
Manganese	**3230**	ug/L	60.0	7.1	30	08/30/24 12:00	09/04/24 22:08	7439-96-5	
Thallium	ND	ug/L	0.20	0.028	1	08/30/24 12:00	09/04/24 00:51	7440-28-0	
Tin	ND	ug/L	1.0	0.14	1	08/30/24 12:00	09/04/24 00:51	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 12:35	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**347**	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	**0.47**	mg/L	0.10	0.031	1		09/09/24 18:09	7664-41-7	

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ANALYTICAL RESULTS

Project: Bremo_2SA2024_CCR&VSWMR_C
Pace Project No.: 92750043

Sample: 082724NNPFDDUPLICATE **Lab ID: 92750043006** Collected: 08/27/24 12:30 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	**18.4**	mg/L	1.0	0.60	1		08/29/24 08:41	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/29/24 08:41	16984-48-8	
Nitrate as N	ND	mg/L	0.10	0.060	1		08/29/24 08:41	14797-55-8	
Sulfate	**39.2**	mg/L	1.0	0.50	1		08/29/24 08:41	14808-79-8	

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QUALITY CONTROL DATA

Project: Bremo_2SA2024_CCR&VSWMR_C
Pace Project No.: 92750043

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: 92750043001, 92750043002, 92750043003, 92750043004, 92750043005, 92750043006

METHOD BLANK: 4526180 Matrix: Water
Associated Lab Samples: 92750043001, 92750043002, 92750043003, 92750043004, 92750043005, 92750043006

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_C
Pace Project No.: 92750043

QC Batch: 880529
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92750043001, 92750043002, 92750043003

METHOD BLANK: 4534653 Matrix: Water
Associated Lab Samples: 92750043001, 92750043002, 92750043003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Mercury	ug/L	ND	0.20	0.12	09/12/24 10:33	

LABORATORY CONTROL SAMPLE: 4534654

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	2.5	2.5	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4534655 4534656

Parameter	Units	92750043002 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	97	98	75-125	1	25	

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QUALITY CONTROL DATA

Project: Bremo_2SA2024_CCR&VSWMR_C
Pace Project No.: 92750043

QC Batch: 880762
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92750043004, 92750043005, 92750043006

METHOD BLANK: 4536079 Matrix: Water
Associated Lab Samples: 92750043004, 92750043005, 92750043006

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_C
Pace Project No.: 92750043

QC Batch: 879448
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92750043001, 92750043003, 92750043004, 92750043005, 92750043006

METHOD BLANK: 4529738 Matrix: Water
Associated Lab Samples: 92750043001, 92750043003, 92750043004, 92750043005, 92750043006

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_C
Pace Project No.: 92750043

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_C
Pace Project No.: 92750043

QC Batch: 880429
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 92750043002

METHOD BLANK: 4534271 Matrix: Water
Associated Lab Samples: 92750043002

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_C
Pace Project No.: 92750043

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_C
Pace Project No.: 92750043

QC Batch: 879461
QC Batch Method: EPA 3010A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92750043001, 92750043002, 92750043003, 92750043004, 92750043005, 92750043006

METHOD BLANK: 4529776 Matrix: Water
Associated Lab Samples: 92750043001, 92750043002, 92750043003, 92750043004, 92750043005, 92750043006

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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Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Bremo_2SA2024_CCR&VSWMR_C
Pace Project No.: 92750043

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_C
Pace Project No.: 92750043

QC Batch: 879383 | 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: 92750043001, 92750043002, 92750043003, 92750043004, 92750043005, 92750043006

METHOD BLANK: 4529543 Matrix: Water
Associated Lab Samples: 92750043001, 92750043002, 92750043003, 92750043004, 92750043005, 92750043006

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_C
Pace Project No.: 92750043

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: 92750043001, 92750043002, 92750043003, 92750043004, 92750043005, 92750043006

METHOD BLANK: 4536523 Matrix: Water
Associated Lab Samples: 92750043001, 92750043002, 92750043003, 92750043004, 92750043005, 92750043006

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_C
Pace Project No.: 92750043

QC Batch: 879107 | Analysis Method: EPA 9056A
QC Batch Method: EPA 9056A | Analysis Description: 9056 IC Anions
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92750043001, 92750043002, 92750043003, 92750043004, 92750043005, 92750043006

METHOD BLANK: 4527763 Matrix: Water
Associated Lab Samples: 92750043001, 92750043002, 92750043003, 92750043004, 92750043005, 92750043006

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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QUALIFIERS

Project: Bremo_2SA2024_CCR&VSWMR_C
Pace Project No.: 92750043

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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(704)875-9092

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Bremo_2SA2024_CCR&VSWMR_C
Pace Project No.: 92750043

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92750043001	**082724NMW24**	EPA 7199	878793		
92750043002	**082724NMW27D**	EPA 7199	878793		
92750043003	**082724NMW33**	EPA 7199	878793		
92750043004	**082724NMW34**	EPA 7199	878793		
92750043005	**082724NMW35**	EPA 7199	878793		
92750043006	**082724NNPFDDUPLICATE**	EPA 7199	878793		
92750043001	**082724NMW24**	EPA 3010A	879448	EPA 6010D	879619
92750043002	**082724NMW27D**	EPA 3010A	880429	EPA 6010D	880630
92750043003	**082724NMW33**	EPA 3010A	879448	EPA 6010D	879619
92750043004	**082724NMW34**	EPA 3010A	879448	EPA 6010D	879619
92750043005	**082724NMW35**	EPA 3010A	879448	EPA 6010D	879619
92750043006	**082724NNPFDDUPLICATE**	EPA 3010A	879448	EPA 6010D	879619
92750043001	**082724NMW24**	EPA 3010A	879461	EPA 6020B	879609
92750043002	**082724NMW27D**	EPA 3010A	879461	EPA 6020B	879609
92750043003	**082724NMW33**	EPA 3010A	879461	EPA 6020B	879609
92750043004	**082724NMW34**	EPA 3010A	879461	EPA 6020B	879609
92750043005	**082724NMW35**	EPA 3010A	879461	EPA 6020B	879609
92750043006	**082724NNPFDDUPLICATE**	EPA 3010A	879461	EPA 6020B	879609
92750043001	**082724NMW24**	EPA 7470A	880529	EPA 7470A	880795
92750043002	**082724NMW27D**	EPA 7470A	880529	EPA 7470A	880795
92750043003	**082724NMW33**	EPA 7470A	880529	EPA 7470A	880795
92750043004	**082724NMW34**	EPA 7470A	880762	EPA 7470A	880915
92750043005	**082724NMW35**	EPA 7470A	880762	EPA 7470A	880915
92750043006	**082724NNPFDDUPLICATE**	EPA 7470A	880762	EPA 7470A	880915
92750043001	**082724NMW24**	SM 2540C-2015	879383		
92750043002	**082724NMW27D**	SM 2540C-2015	879383		
92750043003	**082724NMW33**	SM 2540C-2015	879383		
92750043004	**082724NMW34**	SM 2540C-2015	879383		
92750043005	**082724NMW35**	SM 2540C-2015	879383		
92750043006	**082724NNPFDDUPLICATE**	SM 2540C-2015	879383		
92750043001	**082724NMW24**	EPA 350.1 Rev 2.0 1993	880844		
92750043002	**082724NMW27D**	EPA 350.1 Rev 2.0 1993	880844		
92750043003	**082724NMW33**	EPA 350.1 Rev 2.0 1993	880844		
92750043004	**082724NMW34**	EPA 350.1 Rev 2.0 1993	880844		
92750043005	**082724NMW35**	EPA 350.1 Rev 2.0 1993	880844		
92750043006	**082724NNPFDDUPLICATE**	EPA 350.1 Rev 2.0 1993	880844		
92750043001	**082724NMW24**	EPA 9056A	879107		
92750043002	**082724NMW27D**	EPA 9056A	879107		
92750043003	**082724NMW33**	EPA 9056A	879107		
92750043004	**082724NMW34**	EPA 9056A	879107		
92750043005	**082724NMW35**	EPA 9056A	879107		
92750043006	**082724NNPFDDUPLICATE**	EPA 9056A	879107		

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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: Dominion Energy

Project # WO# : 92750043

92750043

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 5-28-24

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

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

Thermometer: ☑ IR Gun ID: 72T076 **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 | **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#: 92750043**
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	3		3	3																		6	3			
3		1	1		1	1																		2	1			
4		1	1		1	1																		2	1			
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.shedlock@wsp.com
Customer Project #:			
Project Name:	Bremo_2SA2024_CCR&VSWMR_C	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

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
0827NMW24	WT	G			08/27/24	1225	7			X	X	X	X	X	X					* ALL SAMPLES
0827NMW27D	WT	G			08/27/24	1350	21			X	X	X	X	X	X					PRESERVED
0827NMW33	WT	G			08/27/24	1510	7			X	X	X	X	X	X					ON ICE*
0827NMW34	WT	G			08/27/24	1625	7			X	X	X	X	X	X					
0827NMW35	WT	G			08/27/24	1235	7			X	X	X	X	X	X					MS/MSD
0827NNPFDDUPLICATE	WT	G			08/27/24	1230	7			X	X	X	X	X	X					taken at
~~08 24 MS~~	~~WT~~									X	X	X	X	X	X	SD				MW-27D
~~08 24 MSD~~	~~WT~~									X	X	X	X	X	X	SD				

Lab Use Only

Proj. Mgr: Angela Baioni

AcctNum / Client ID:

Table #:

Profile / Template: 13861

Prelog / Bottle Ord. ID: EZ 3146513

Preservation non-conformance identified for sample.

**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®:

COC ID: Bremo_2SA2024_CCR&VSWMR_C-2-1

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:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Tracking Number:
WSP	08/27/24 1835	APR/Pace MRL	8.28.24 1009	
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/

DC#_Title: Excel Form Template
Effective Date:

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
25	CMH	9.0				
270		8.9	9.0	11:45	base 1	
270 MS		8.8	9.1	11:47	2	
270 MSD		8.7				
33		9.1				
34		8.9	9.1	11:50	1	
35	9.1	11:52				
Dup		9.1				

ANALYTICAL REPORT

September 20, 2024

Pace Analytical - Huntersville, NC

Sample Delivery Group:	L1773890
Samples Received:	09/04/2024
Project Number:	92750043
Description:	Bremo_2SA2024_CCR&CCR&VSWMR_C
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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082724NMW24 L1773890-01 Non-Potable Water

Collected by	Collected date/time	Received date/time
	08/27/24 12:25	09/04/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 903.0/9315	WG2356087	1	09/05/24 10:04	09/14/24 08:34	ASN	Mt. Juliet, TN
Radiochemistry by Method 904/9320	WG2356240	1	09/04/24 23:00	09/17/24 21:17	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2356087	1	09/05/24 10:04	09/17/24 21:17	DDD	Mt. Juliet, TN

082724NMW27D L1773890-02 Non-Potable Water

Collected by	Collected date/time	Received date/time
	08/27/24 13:50	09/04/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 903.0/9315	WG2356087	1	09/05/24 10:04	09/14/24 08:34	ASN	Mt. Juliet, TN
Radiochemistry by Method 904/9320	WG2356240	1	09/04/24 23:00	09/17/24 21:17	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2356087	1	09/05/24 10:04	09/17/24 21:17	DDD	Mt. Juliet, TN

082724NMW33 L1773890-03 Non-Potable Water

Collected by	Collected date/time	Received date/time
	08/27/24 15:10	09/04/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 903.0/9315	WG2356087	1	09/05/24 10:04	09/14/24 08:34	ASN	Mt. Juliet, TN
Radiochemistry by Method 904/9320	WG2356240	1	09/04/24 23:00	09/17/24 21:17	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2356087	1	09/05/24 10:04	09/17/24 21:17	DDD	Mt. Juliet, TN

082724NMW34 L1773890-04 Non-Potable Water

Collected by	Collected date/time	Received date/time
	08/27/24 16:25	09/04/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 903.0/9315	WG2356087	1	09/05/24 10:04	09/14/24 09:35	ASN	Mt. Juliet, TN
Radiochemistry by Method 904/9320	WG2356240	1	09/04/24 23:00	09/17/24 21:17	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2356087	1	09/05/24 10:04	09/17/24 21:17	DDD	Mt. Juliet, TN

082724NMW35 L1773890-05 Non-Potable Water

Collected by	Collected date/time	Received date/time
	08/27/24 12:35	09/04/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 903.0/9315	WG2356087	1	09/05/24 10:04	09/14/24 09:35	ASN	Mt. Juliet, TN
Radiochemistry by Method 904/9320	WG2356240	1	09/04/24 23:00	09/17/24 21:17	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2356087	1	09/05/24 10:04	09/17/24 21:17	DDD	Mt. Juliet, TN

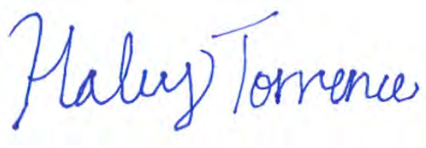
082724NNPFDDUPLICATE L1773890-06 Non-Potable Water

Collected by	Collected date/time	Received date/time
	08/27/24 12:30	09/04/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 903.0/9315	WG2356087	1	09/05/24 10:04	09/14/24 09:35	ASN	Mt. Juliet, TN
Radiochemistry by Method 904/9320	WG2356240	1	09/04/24 23:00	09/17/24 21:17	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2356087	1	09/05/24 10:04	09/17/24 21:17	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	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
Radium-226	0.393		0.215	0.359	0.235	0.0810	09/14/2024 08:34	WG2356087
(T) Barium	*98.3*					*30.0-143*	*09/14/2024 08:34*	WG2356087

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	1.25		0.319	0.536	0.556	0.290	09/17/2024 21:17	WG2356240
(T) Barium	*126*					*30.0-143*	*09/17/2024 21:17*	WG2356240
(T) Yttrium	*84.2*					*30.0-136*	*09/17/2024 21:17*	WG2356240

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.64		0.385	0.604	09/17/2024 21:17	WG2356087

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	0.290		0.177	0.319	0.185	0.0563	09/14/2024 08:34	WG2356087
(T) Barium	*100*					*30.0-143*	*09/14/2024 08:34*	WG2356087

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	1.24		0.508	0.970	0.907	0.477	09/17/2024 21:17	WG2356240
(T) Barium	*125*					*30.0-143*	*09/17/2024 21:17*	WG2356240
(T) Yttrium	*104*					*30.0-136*	*09/17/2024 21:17*	WG2356240

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.53		0.538	0.926	09/17/2024 21:17	WG2356087

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	0.241	J	0.200	0.343	0.296	0.112	09/14/2024 08:34	WG2356087
(T) Barium	*100*					*30.0-143*	*09/14/2024 08:34*	WG2356087

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	0.172	U	0.240	0.438	0.440	0.230	09/17/2024 21:17	WG2356240
(T) Barium	*127*					*30.0-143*	*09/17/2024 21:17*	WG2356240
(T) Yttrium	*110*					*30.0-136*	*09/17/2024 21:17*	WG2356240

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.412	J	0.312	0.530	09/17/2024 21:17	WG2356087

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	0.216	J	0.170	0.312	0.230	0.0793	09/14/2024 09:35	WG2356087
(T) Barium	*105*					*30.0-143*	*09/14/2024 09:35*	WG2356087

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	-0.0904	U	0.242	0.440	0.452	0.236	09/17/2024 21:17	WG2356240
(T) Barium	*135*					*30.0-143*	*09/17/2024 21:17*	WG2356240
(T) Yttrium	*102*					*30.0-136*	*09/17/2024 21:17*	WG2356240

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.216	J	0.296	0.507	09/17/2024 21:17	WG2356087

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	0.868		0.299	0.441	0.231	0.0795	09/14/2024 09:35	WG2356087
(T) Barium	*103*					*30.0-143*	*09/14/2024 09:35*	WG2356087

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	0.326	J	0.266	0.468	0.484	0.252	09/17/2024 21:17	WG2356240
(T) Barium	*130*					*30.0-143*	*09/17/2024 21:17*	WG2356240
(T) Yttrium	*95.8*					*30.0-136*	*09/17/2024 21:17*	WG2356240

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	1.19		0.400	0.536	09/17/2024 21:17	WG2356087

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	1.06		0.320	0.463	0.184	0.0562	09/14/2024 09:35	WG2356087
(T) Barium	*99.9*					*30.0-143*	*09/14/2024 09:35*	WG2356087

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	1.11		0.283	0.492	0.493	0.257	09/17/2024 21:17	WG2356240
(T) Barium	*131*					*30.0-143*	*09/17/2024 21:17*	WG2356240
(T) Yttrium	*90.3*					*30.0-136*	*09/17/2024 21:17*	WG2356240

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	2.17		0.427	0.526	09/17/2024 21:17	WG2356087

QUALITY CONTROL SUMMARY

L1773890-01,02,03,04,05,06

Method Blank (MB)

(MB) R4120397-1 09/14/24 06:34

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-226	0.0121	U	0.0710	0.149	0.0564
(T) Barium	*104*		*104*		

L1772580-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1772580-01 09/14/24 08:34 • (DUP) R4120397-5 09/14/24 07:34

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	0.244	0.179	0.234	0.0806	0.500	0.416	0.615	0.233	68.7	0.565	J	20	3
(T) Barium	*98.5*				*96.5*	*96.5*							

Laboratory Control Sample (LCS)

(LCS) R4120397-2 09/14/24 07:34

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-226	5.00	5.35	107	75.0-125	
(T) Barium			*102*		

L1773890-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1773890-02 09/14/24 08:34 • (MS) R4120397-3 09/14/24 07:34 • (MSD) R4120397-4 09/14/24 07:34

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	0.290	19.5	19.0	96.3	93.6	1	75.0-125			2.80		20
(T) Barium		*100*			*106*	*110*							

Method Blank (MB)

(MB) R4122140-1 09/17/24 21:17

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-228	0.257	J	0.170	0.309	0.162
(T) Barium	*130*		*130*		
(T) Yttrium	*97.9*		*97.9*		

L1772807-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1772807-01 09/17/24 21:17 • (DUP) R4122140-5 09/17/24 21:17

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	0.507	0.240	0.433	0.231	0.334	0.297	0.547	0.289	41.3	0.454	J	20	3
(T) Barium	*107*				*123*	*123*							
(T) Yttrium	*103*				*90.9*	*90.9*							

Laboratory Control Sample (LCS)

(LCS) R4122140-2 09/17/24 21:17

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	4.23	84.6	80.0-120	
(T) Barium			*128*		
(T) Yttrium			*98.9*		

L1773890-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1773890-02 09/17/24 21:17 • (MS) R4122140-3 09/17/24 21:17 • (MSD) R4122140-4 09/17/24 21:17

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	1.24	14.4	14.3	78.9	77.9	1	70.0-130			1.19		20
(T) Barium		*125*			*125*	*135*							
(T) Yttrium		*104*			*97.0*	*109*							

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: 8/28/2024 Results Requested By: 9/12/2024

Workorder: 92750043 Workorder Name: Bremo_2SA2024_CCR&VSWMR_C

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

L1773590

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers HN03	Requested Analysis: Ra 226/903.0	Ra 228/904.0 + Combined Ra	LAB USE ONLY
1	082724NMW24	PS	8/27/2024 12:25	92750043001	Water	2	X	X	-01
2	082724NMW27D	RQS	8/27/2024 13:50	92750043002	Water	6	X	X	-02
3	082724NMW33	PS	8/27/2024 15:10	92750043003	Water	2	X	X	-03
4	082724NMW34	PS	8/27/2024 16:25	92750043004	Water	2	X	X	-04
5	082724NMW35	PS	8/27/2024 12:35	92750043005	Water	2	X	X	-05
6	082724NNPFDDUPLICATE	PS	8/27/2024 12:30	92750043006	Water	2	X	X	-06

Comments: *MS/MSD required on sample 92750043-002*

Transfers	Released By	Date/Time	Received By	Date/Time
1	HHB/Pace HVL	9/3/24 1800		
2			Christopher L Gallin	9/4/24 0900
3				

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.

1.1+.3=1.4

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	16.7 TOTAL	
Sufficient volume sent:	Y N		
PA 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 # 92750043
(To be completed by sending lab)

Sending Project No:	92750043
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	6	SI-38RAD	SUB PASI RAD
Ra 228/904.0 + Combined Ra	BP1N		HNO3	6	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_D
Pace Project No.: 92749754

Dear Kelly Hicks:

Enclosed are the analytical results for sample(s) received by the laboratory between August 27, 2024 and August 28, 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_D
Pace Project No.: 92749754

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_D
Pace Project No.: 92749754

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92749754001	**082624NMW25D**	Water	08/26/24 15:30	08/27/24 10:10
92749754002	**082624NMW26S**	Water	08/26/24 14:00	08/27/24 10:10
92749754003	**082624NMW26D**	Water	08/26/24 13:10	08/27/24 10:10
92749754004	**082624NMW28**	Water	08/26/24 15:15	08/27/24 10:10
92749754005	**082724NMW25S**	Water	08/27/24 13:40	08/28/24 10:05
92749754006	**082724NMW27S**	Water	08/27/24 15:15	08/28/24 10:05

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SAMPLE ANALYTE COUNT

Project: Bremo_2SA2024_CCR&VSWMR_D
Pace Project No.: 92749754

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92749754001	**082624NMW25D**	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
92749754002	**082624NMW26S**	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
92749754003	**082624NMW26D**	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
92749754004	**082624NMW28**	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
92749754005	**082724NMW25S**	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
92749754006	**082724NMW27S**	EPA 7199	SMS1	1	PASI-C
		EPA 6010D	DBB1	16	PASI-A

REPORT OF LABORATORY ANALYSIS

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(704)875-9092

SAMPLE ANALYTE COUNT

Project: Bremo_2SA2024_CCR&VSWMR_D
Pace Project No.: 92749754

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		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

REPORT OF LABORATORY ANALYSIS

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(704)875-9092

SUMMARY OF DETECTION

Project: Bremo_2SA2024_CCR&VSWMR_D
Pace Project No.: 92749754

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92749754001	**082624NMW25D**					
EPA 7199	Chromium, Hexavalent	0.0080J	ug/L	0.025	08/27/24 17:59	H1
EPA 6010D	Barium	21.2	ug/L	5.0	09/04/24 23:50	
EPA 6010D	Boron	20.6J	ug/L	50.0	09/04/24 23:50	
EPA 6010D	Calcium	25200	ug/L	100	09/04/24 23:50	
EPA 6010D	Copper	1.7J	ug/L	5.0	09/04/24 23:50	
EPA 6010D	Molybdenum	11.1	ug/L	5.0	09/04/24 23:50	
EPA 6010D	Nickel	2.9J	ug/L	5.0	09/04/24 23:50	
EPA 6010D	Hardness, Total(SM 2340B)	79200	ug/L	662	09/04/24 23:50	
EPA 6010D	Zinc	4.4J	ug/L	10.0	09/04/24 23:50	
EPA 6020B	Cobalt	0.78J	ug/L	1.0	09/04/24 02:32	
EPA 6020B	Iron	736	ug/L	20.0	09/04/24 02:32	
EPA 6020B	Lead	0.52J	ug/L	1.0	09/04/24 02:32	
EPA 6020B	Lithium	2.9	ug/L	2.5	09/04/24 02:32	
EPA 6020B	Manganese	125	ug/L	2.0	09/04/24 02:32	
SM 2540C-2015	Total Dissolved Solids	173	mg/L	25.0	08/30/24 15:22	
EPA 9056A	Chloride	9.6	mg/L	1.0	08/29/24 04:31	
EPA 9056A	Sulfate	18.6	mg/L	1.0	08/29/24 04:31	
92749754002	**082624NMW26S**					
EPA 7199	Chromium, Hexavalent	0.27	ug/L	0.025	08/27/24 13:16	
EPA 6010D	Barium	18.3	ug/L	5.0	09/04/24 23:53	
EPA 6010D	Calcium	8110	ug/L	100	09/04/24 23:53	
EPA 6010D	Hardness, Total(SM 2340B)	26000	ug/L	662	09/04/24 23:53	
EPA 6020B	Iron	18.4J	ug/L	20.0	09/04/24 02:36	
EPA 6020B	Lithium	0.83J	ug/L	2.5	09/04/24 02:36	
EPA 6020B	Manganese	3.1	ug/L	2.0	09/04/24 02:36	
SM 2540C-2015	Total Dissolved Solids	104	mg/L	25.0	08/30/24 15:22	
EPA 9056A	Chloride	2.6	mg/L	1.0	08/29/24 04:45	
EPA 9056A	Sulfate	2.1	mg/L	1.0	08/29/24 04:45	
92749754003	**082624NMW26D**					
EPA 7199	Chromium, Hexavalent	0.14	ug/L	0.025	08/27/24 12:40	
EPA 6010D	Barium	162	ug/L	5.0	09/04/24 23:56	
EPA 6010D	Boron	6.0J	ug/L	50.0	09/04/24 23:56	
EPA 6010D	Calcium	40000	ug/L	100	09/04/24 23:56	
EPA 6010D	Molybdenum	3.1J	ug/L	5.0	09/04/24 23:56	
EPA 6010D	Nickel	1.2J	ug/L	5.0	09/04/24 23:56	
EPA 6010D	Silver	0.92J	ug/L	5.0	09/04/24 23:56	
EPA 6010D	Hardness, Total(SM 2340B)	133000	ug/L	662	09/04/24 23:56	
EPA 6020B	Cobalt	0.58J	ug/L	1.0	09/04/24 02:40	
EPA 6020B	Iron	2280	ug/L	20.0	09/04/24 02:40	
EPA 6020B	Lithium	5.4	ug/L	2.5	09/04/24 02:40	
EPA 6020B	Manganese	1030	ug/L	20.0	09/04/24 17:06	
SM 2540C-2015	Total Dissolved Solids	273	mg/L	25.0	08/30/24 15:22	
EPA 350.1 Rev 2.0 1993	Nitrogen, Ammonia	0.035J	mg/L	0.10	09/05/24 14:09	
EPA 9056A	Chloride	10.2	mg/L	1.0	08/29/24 05:00	
EPA 9056A	Sulfate	51.0	mg/L	1.0	08/29/24 05:00	

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_D
Pace Project No.: 92749754

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92749754004	**082624NMW28**					
EPA 7199	Chromium, Hexavalent	0.25	ug/L	0.12	08/27/24 20:03	H1,M1
EPA 6010D	Barium	46.3	ug/L	5.0	09/04/24 23:59	
EPA 6010D	Boron	246	ug/L	50.0	09/04/24 23:59	
EPA 6010D	Calcium	58200	ug/L	100	09/04/24 23:59	
EPA 6010D	Chromium	1.2J	ug/L	5.0	09/04/24 23:59	
EPA 6010D	Nickel	12.1	ug/L	5.0	09/04/24 23:59	
EPA 6010D	Hardness, Total(SM 2340B)	230000	ug/L	662	09/04/24 23:59	
EPA 6010D	Vanadium	2.0J	ug/L	5.0	09/04/24 23:59	
EPA 6020B	Iron	218	ug/L	20.0	09/04/24 02:43	
EPA 6020B	Lithium	1.5J	ug/L	2.5	09/04/24 02:43	
EPA 6020B	Manganese	12.7	ug/L	2.0	09/04/24 02:43	
SM 2540C-2015	Total Dissolved Solids	375	mg/L	25.0	08/30/24 15:22	
EPA 9056A	Chloride	9.6	mg/L	1.0	08/29/24 05:14	
EPA 9056A	Nitrate as N	0.26	mg/L	0.10	08/29/24 05:14	H1
EPA 9056A	Sulfate	93.6	mg/L	2.0	08/29/24 07:40	M1
92749754005	**082724NMW25S**					
EPA 7199	Chromium, Hexavalent	0.083	ug/L	0.025	08/28/24 19:44	H1
EPA 6010D	Barium	11.6	ug/L	5.0	09/05/24 03:23	
EPA 6010D	Boron	15.0J	ug/L	50.0	09/05/24 03:23	
EPA 6010D	Calcium	39400	ug/L	100	09/05/24 03:23	
EPA 6010D	Copper	1.2J	ug/L	5.0	09/05/24 03:23	
EPA 6010D	Nickel	0.94J	ug/L	5.0	09/05/24 03:23	
EPA 6010D	Silver	2.2J	ug/L	5.0	09/05/24 03:23	
EPA 6010D	Hardness, Total(SM 2340B)	138000	ug/L	662	09/05/24 03:23	
EPA 6020B	Cobalt	1.9	ug/L	1.0	09/04/24 00:58	
EPA 6020B	Iron	331	ug/L	20.0	09/04/24 00:58	
EPA 6020B	Lithium	0.90J	ug/L	2.5	09/04/24 00:58	
EPA 6020B	Manganese	83.5	ug/L	2.0	09/04/24 00:58	
EPA 6020B	Tin	0.16J	ug/L	1.0	09/04/24 00:58	
SM 2540C-2015	Total Dissolved Solids	222	mg/L	25.0	08/30/24 15:25	
EPA 9056A	Chloride	8.4	mg/L	1.0	08/29/24 09:11	
EPA 9056A	Fluoride	0.072J	mg/L	0.10	08/29/24 09:11	
EPA 9056A	Sulfate	15.6	mg/L	1.0	08/29/24 09:11	
92749754006	**082724NMW27S**					
EPA 7199	Chromium, Hexavalent	0.93	ug/L	0.12	08/29/24 00:59	H1
EPA 6010D	Barium	77.3	ug/L	5.0	09/05/24 03:26	
EPA 6010D	Boron	1410	ug/L	50.0	09/05/24 03:26	
EPA 6010D	Calcium	117000	ug/L	1000	09/05/24 10:59	
EPA 6010D	Copper	0.83J	ug/L	5.0	09/05/24 03:26	
EPA 6010D	Nickel	1.6J	ug/L	5.0	09/05/24 03:26	
EPA 6010D	Silver	2.5J	ug/L	5.0	09/05/24 03:26	
EPA 6010D	Hardness, Total(SM 2340B)	505000	ug/L	6620	09/05/24 10:59	
EPA 6010D	Vanadium	4.2J	ug/L	5.0	09/05/24 03:26	
EPA 6020B	Cobalt	0.15J	ug/L	1.0	09/04/24 01:02	
EPA 6020B	Iron	27.9	ug/L	20.0	09/04/24 01:02	
EPA 6020B	Lithium	4.6	ug/L	2.5	09/04/24 01:02	

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_2SA2024_CCR&VSWMR_D
Pace Project No.: 92749754

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92749754006	**082724NMW27S**					
EPA 6020B	Manganese	31.5	ug/L	2.0	09/04/24 01:02	
SM 2540C-2015	Total Dissolved Solids	663	mg/L	25.0	08/30/24 15:25	
EPA 9056A	Chloride	10.8	mg/L	1.0	08/29/24 10:25	
EPA 9056A	Sulfate	155	mg/L	3.0	08/29/24 12:24	

REPORT OF LABORATORY ANALYSIS

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(704)875-9092

PROJECT NARRATIVE

Project: Bremo_2SA2024_CCR&VSWMR_D
Pace Project No.: 92749754

Method: **EPA 7199**
Description: 7199 Chromium, Hexavalent
Client: Dominion Energy_VA
Date: October 13, 2024

General Information:
6 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.
- 082624NMW25D (Lab ID: 92749754001)
- 082624NMW28 (Lab ID: 92749754004)
- 082724NMW25S (Lab ID: 92749754005)
- 082724NMW27S (Lab ID: 92749754006)

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

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

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PROJECT NARRATIVE

Project: Bremo_2SA2024_CCR&VSWMR_D
Pace Project No.: 92749754

Method: **EPA 7199**
Description: 7199 Chromium, Hexavalent
Client: Dominion Energy_VA
Date: October 13, 2024

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_D
Pace Project No.: 92749754

Method: **EPA 6010D**
Description: 6010 MET ICP
Client: Dominion Energy_VA
Date: October 13, 2024

General Information:
6 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_D
Pace Project No.: 92749754

Method: **EPA 6020B**
Description: 6020 MET ICPMS
Client: Dominion Energy_VA
Date: October 13, 2024

General Information:
6 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_D
Pace Project No.: 92749754

Method: **EPA 7470A**
Description: 7470 Mercury
Client: Dominion Energy_VA
Date: October 13, 2024

General Information:
6 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_D
Pace Project No.: 92749754

Method: **SM 2540C-2015**
Description: 2540C Total Dissolved Solids
Client: Dominion Energy_VA
Date: October 13, 2024

General Information:
6 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_D
Pace Project No.: 92749754

Method: **EPA 350.1 Rev 2.0 1993**
Description: 350.1 Ammonia
Client: Dominion Energy_VA
Date: October 13, 2024

General Information:
6 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

QC Batch: 881063

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92749754006,92750052001

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

- MS (Lab ID: 4537720)
  - Nitrogen, Ammonia
- MSD (Lab ID: 4537721)
  - Nitrogen, Ammonia

Additional Comments:

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PROJECT NARRATIVE

Project: Bremo_2SA2024_CCR&VSWMR_D
Pace Project No.: 92749754

Method: **EPA 9056A**
Description: 9056 IC Anions 48hr
Client: Dominion Energy_VA
Date: October 13, 2024

General Information:
6 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.
- 082624NMW25D (Lab ID: 92749754001)
- 082624NMW26D (Lab ID: 92749754003)
- 082624NMW26S (Lab ID: 92749754002)
- 082624NMW28 (Lab ID: 92749754004)

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

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

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_D
Pace Project No.: 92749754

Sample: 082624NMW25D **Lab ID: 92749754001** Collected: 08/26/24 15:30 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	**0.0080J**	ug/L	0.025	0.0043	1		08/27/24 17:59	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 23:50	7440-36-0	
Arsenic	ND	ug/L	10.0	2.5	1	08/29/24 11:40	09/04/24 23:50	7440-38-2	
Barium	**21.2**	ug/L	5.0	0.79	1	08/29/24 11:40	09/04/24 23:50	7440-39-3	
Beryllium	ND	ug/L	1.0	0.16	1	08/29/24 11:40	09/04/24 23:50	7440-41-7	
Boron	**20.6J**	ug/L	50.0	4.0	1	08/29/24 11:40	09/04/24 23:50	7440-42-8	
Cadmium	ND	ug/L	1.0	0.29	1	08/29/24 11:40	09/04/24 23:50	7440-43-9	
Calcium	**25200**	ug/L	100	14.7	1	08/29/24 11:40	09/04/24 23:50	7440-70-2	
Chromium	ND	ug/L	5.0	0.63	1	08/29/24 11:40	09/04/24 23:50	7440-47-3	
Copper	**1.7J**	ug/L	5.0	0.62	1	08/29/24 11:40	09/04/24 23:50	7440-50-8	
Molybdenum	**11.1**	ug/L	5.0	2.6	1	08/29/24 11:40	09/04/24 23:50	7439-98-7	
Nickel	**2.9J**	ug/L	5.0	0.88	1	08/29/24 11:40	09/04/24 23:50	7440-02-0	
Selenium	ND	ug/L	10.0	4.1	1	08/29/24 11:40	09/04/24 23:50	7782-49-2	
Silver	ND	ug/L	5.0	0.49	1	08/29/24 11:40	09/04/24 23:50	7440-22-4	
Hardness, Total(SM 2340B)	**79200**	ug/L	662	36.8	1	08/29/24 11:40	09/04/24 23:50		
Vanadium	ND	ug/L	5.0	1.6	1	08/29/24 11:40	09/04/24 23:50	7440-62-2	
Zinc	**4.4J**	ug/L	10.0	3.0	1	08/29/24 11:40	09/04/24 23:50	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Cobalt	**0.78J**	ug/L	1.0	0.14	1	08/29/24 12:00	09/04/24 02:32	7440-48-4	
Iron	**736**	ug/L	20.0	3.0	1	08/29/24 12:00	09/04/24 02:32	7439-89-6	
Lead	**0.52J**	ug/L	1.0	0.18	1	08/29/24 12:00	09/04/24 02:32	7439-92-1	
Lithium	**2.9**	ug/L	2.5	0.33	1	08/29/24 12:00	09/04/24 02:32	7439-93-2	
Manganese	**125**	ug/L	2.0	0.24	1	08/29/24 12:00	09/04/24 02:32	7439-96-5	
Thallium	ND	ug/L	0.20	0.028	1	08/29/24 12:00	09/04/24 02:32	7440-28-0	
Tin	ND	ug/L	1.0	0.14	1	08/29/24 12:00	09/04/24 02:32	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 10:01	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**173**	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 14:03	7664-41-7	

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ANALYTICAL RESULTS

Project: Bremo_2SA2024_CCR&VSWMR_D
Pace Project No.: 92749754

Sample: 082624NMW25D **Lab ID: 92749754001** Collected: 08/26/24 15:30 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	**9.6**	mg/L	1.0	0.60	1		08/29/24 04:31	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/29/24 04:31	16984-48-8	
Nitrate as N	ND	mg/L	0.10	0.060	1		08/29/24 04:31	14797-55-8	H1
Sulfate	**18.6**	mg/L	1.0	0.50	1		08/29/24 04:31	14808-79-8	

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ANALYTICAL RESULTS

Project: Bremo_2SA2024_CCR&VSWMR_D
Pace Project No.: 92749754

Sample: 082624NMW26S **Lab ID: 92749754002** Collected: 08/26/24 14:00 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	**0.27**	ug/L	0.025	0.0043	1		08/27/24 13:16	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	09/04/24 23:53	7440-36-0	
Arsenic	ND	ug/L	10.0	2.5	1	08/29/24 11:40	09/04/24 23:53	7440-38-2	
Barium	**18.3**	ug/L	5.0	0.79	1	08/29/24 11:40	09/04/24 23:53	7440-39-3	
Beryllium	ND	ug/L	1.0	0.16	1	08/29/24 11:40	09/04/24 23:53	7440-41-7	
Boron	ND	ug/L	50.0	4.0	1	08/29/24 11:40	09/04/24 23:53	7440-42-8	
Cadmium	ND	ug/L	1.0	0.29	1	08/29/24 11:40	09/04/24 23:53	7440-43-9	
Calcium	**8110**	ug/L	100	14.7	1	08/29/24 11:40	09/04/24 23:53	7440-70-2	
Chromium	ND	ug/L	5.0	0.63	1	08/29/24 11:40	09/04/24 23:53	7440-47-3	
Copper	ND	ug/L	5.0	0.62	1	08/29/24 11:40	09/04/24 23:53	7440-50-8	
Molybdenum	ND	ug/L	5.0	2.6	1	08/29/24 11:40	09/04/24 23:53	7439-98-7	
Nickel	ND	ug/L	5.0	0.88	1	08/29/24 11:40	09/04/24 23:53	7440-02-0	
Selenium	ND	ug/L	10.0	4.1	1	08/29/24 11:40	09/04/24 23:53	7782-49-2	
Silver	ND	ug/L	5.0	0.49	1	08/29/24 11:40	09/04/24 23:53	7440-22-4	
Hardness, Total(SM 2340B)	**26000**	ug/L	662	36.8	1	08/29/24 11:40	09/04/24 23:53		
Vanadium	ND	ug/L	5.0	1.6	1	08/29/24 11:40	09/04/24 23:53	7440-62-2	
Zinc	ND	ug/L	10.0	3.0	1	08/29/24 11:40	09/04/24 23:53	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 02:36	7440-48-4	
Iron	**18.4J**	ug/L	20.0	3.0	1	08/29/24 12:00	09/04/24 02:36	7439-89-6	
Lead	ND	ug/L	1.0	0.18	1	08/29/24 12:00	09/04/24 02:36	7439-92-1	
Lithium	**0.83J**	ug/L	2.5	0.33	1	08/29/24 12:00	09/04/24 02:36	7439-93-2	
Manganese	**3.1**	ug/L	2.0	0.24	1	08/29/24 12:00	09/04/24 02:36	7439-96-5	
Thallium	ND	ug/L	0.20	0.028	1	08/29/24 12:00	09/04/24 02:36	7440-28-0	
Tin	ND	ug/L	1.0	0.14	1	08/29/24 12:00	09/04/24 02:36	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	09/05/24 19:56	09/12/24 10:04	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**104**	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 14:07	7664-41-7	

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ANALYTICAL RESULTS

Project: Bremo_2SA2024_CCR&VSWMR_D
Pace Project No.: 92749754

Sample: 082624NMW26S **Lab ID: 92749754002** Collected: 08/26/24 14:00 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	**2.6**	mg/L	1.0	0.60	1		08/29/24 04:45	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/29/24 04:45	16984-48-8	
Nitrate as N	ND	mg/L	0.10	0.060	1		08/29/24 04:45	14797-55-8	H1
Sulfate	**2.1**	mg/L	1.0	0.50	1		08/29/24 04:45	14808-79-8	

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(704)875-9092

ANALYTICAL RESULTS

Project: Bremo_2SA2024_CCR&VSWMR_D
Pace Project No.: 92749754

Sample: 082624NMW26D **Lab ID: 92749754003** Collected: 08/26/24 13:10 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	**0.14**	ug/L	0.025	0.0043	1		08/27/24 12:40	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	09/04/24 23:56	7440-36-0	
Arsenic	ND	ug/L	10.0	2.5	1	08/29/24 11:40	09/04/24 23:56	7440-38-2	
Barium	**162**	ug/L	5.0	0.79	1	08/29/24 11:40	09/04/24 23:56	7440-39-3	
Beryllium	ND	ug/L	1.0	0.16	1	08/29/24 11:40	09/04/24 23:56	7440-41-7	
Boron	**6.0J**	ug/L	50.0	4.0	1	08/29/24 11:40	09/04/24 23:56	7440-42-8	
Cadmium	ND	ug/L	1.0	0.29	1	08/29/24 11:40	09/04/24 23:56	7440-43-9	
Calcium	**40000**	ug/L	100	14.7	1	08/29/24 11:40	09/04/24 23:56	7440-70-2	
Chromium	ND	ug/L	5.0	0.63	1	08/29/24 11:40	09/04/24 23:56	7440-47-3	
Copper	ND	ug/L	5.0	0.62	1	08/29/24 11:40	09/04/24 23:56	7440-50-8	
Molybdenum	**3.1J**	ug/L	5.0	2.6	1	08/29/24 11:40	09/04/24 23:56	7439-98-7	
Nickel	**1.2J**	ug/L	5.0	0.88	1	08/29/24 11:40	09/04/24 23:56	7440-02-0	
Selenium	ND	ug/L	10.0	4.1	1	08/29/24 11:40	09/04/24 23:56	7782-49-2	
Silver	**0.92J**	ug/L	5.0	0.49	1	08/29/24 11:40	09/04/24 23:56	7440-22-4	
Hardness, Total(SM 2340B)	**133000**	ug/L	662	36.8	1	08/29/24 11:40	09/04/24 23:56		
Vanadium	ND	ug/L	5.0	1.6	1	08/29/24 11:40	09/04/24 23:56	7440-62-2	
Zinc	ND	ug/L	10.0	3.0	1	08/29/24 11:40	09/04/24 23:56	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Cobalt	**0.58J**	ug/L	1.0	0.14	1	08/29/24 12:00	09/04/24 02:40	7440-48-4	
Iron	**2280**	ug/L	20.0	3.0	1	08/29/24 12:00	09/04/24 02:40	7439-89-6	
Lead	ND	ug/L	1.0	0.18	1	08/29/24 12:00	09/04/24 02:40	7439-92-1	
Lithium	**5.4**	ug/L	2.5	0.33	1	08/29/24 12:00	09/04/24 02:40	7439-93-2	
Manganese	**1030**	ug/L	20.0	2.4	10	08/29/24 12:00	09/04/24 17:06	7439-96-5	
Thallium	ND	ug/L	0.20	0.028	1	08/29/24 12:00	09/04/24 02:40	7440-28-0	
Tin	ND	ug/L	1.0	0.14	1	08/29/24 12:00	09/04/24 02:40	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 10:06	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**273**	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	**0.035J**	mg/L	0.10	0.031	1		09/05/24 14:09	7664-41-7	

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ANALYTICAL RESULTS

Project: Bremo_2SA2024_CCR&VSWMR_D
Pace Project No.: 92749754

Sample: 082624NMW26D **Lab ID: 92749754003** Collected: 08/26/24 13:10 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	**10.2**	mg/L	1.0	0.60	1		08/29/24 05:00	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/29/24 05:00	16984-48-8	
Nitrate as N	ND	mg/L	0.10	0.060	1		08/29/24 05:00	14797-55-8	H1
Sulfate	**51.0**	mg/L	1.0	0.50	1		08/29/24 05:00	14808-79-8	

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ANALYTICAL RESULTS

Project: Bremo_2SA2024_CCR&VSWMR_D
Pace Project No.: 92749754

Sample: 082624NMW28 **Lab ID: 92749754004** Collected: 08/26/24 15:15 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	**0.25**	ug/L	0.12	0.022	5		08/27/24 20:03	18540-29-9	H1,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	08/29/24 11:40	09/04/24 23:59	7440-36-0	
Arsenic	ND	ug/L	10.0	2.5	1	08/29/24 11:40	09/04/24 23:59	7440-38-2	
Barium	**46.3**	ug/L	5.0	0.79	1	08/29/24 11:40	09/04/24 23:59	7440-39-3	
Beryllium	ND	ug/L	1.0	0.16	1	08/29/24 11:40	09/04/24 23:59	7440-41-7	
Boron	**246**	ug/L	50.0	4.0	1	08/29/24 11:40	09/04/24 23:59	7440-42-8	
Cadmium	ND	ug/L	1.0	0.29	1	08/29/24 11:40	09/04/24 23:59	7440-43-9	
Calcium	**58200**	ug/L	100	14.7	1	08/29/24 11:40	09/04/24 23:59	7440-70-2	
Chromium	**1.2J**	ug/L	5.0	0.63	1	08/29/24 11:40	09/04/24 23:59	7440-47-3	
Copper	ND	ug/L	5.0	0.62	1	08/29/24 11:40	09/04/24 23:59	7440-50-8	
Molybdenum	ND	ug/L	5.0	2.6	1	08/29/24 11:40	09/04/24 23:59	7439-98-7	
Nickel	**12.1**	ug/L	5.0	0.88	1	08/29/24 11:40	09/04/24 23:59	7440-02-0	
Selenium	ND	ug/L	10.0	4.1	1	08/29/24 11:40	09/04/24 23:59	7782-49-2	
Silver	ND	ug/L	5.0	0.49	1	08/29/24 11:40	09/04/24 23:59	7440-22-4	
Hardness, Total(SM 2340B)	**230000**	ug/L	662	36.8	1	08/29/24 11:40	09/04/24 23:59		
Vanadium	**2.0J**	ug/L	5.0	1.6	1	08/29/24 11:40	09/04/24 23:59	7440-62-2	
Zinc	ND	ug/L	10.0	3.0	1	08/29/24 11:40	09/04/24 23:59	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 02:43	7440-48-4	
Iron	**218**	ug/L	20.0	3.0	1	08/29/24 12:00	09/04/24 02:43	7439-89-6	
Lead	ND	ug/L	1.0	0.18	1	08/29/24 12:00	09/04/24 02:43	7439-92-1	
Lithium	**1.5J**	ug/L	2.5	0.33	1	08/29/24 12:00	09/04/24 02:43	7439-93-2	
Manganese	**12.7**	ug/L	2.0	0.24	1	08/29/24 12:00	09/04/24 02:43	7439-96-5	
Thallium	ND	ug/L	0.20	0.028	1	08/29/24 12:00	09/04/24 02:43	7440-28-0	
Tin	ND	ug/L	1.0	0.14	1	08/29/24 12:00	09/04/24 02:43	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 10:08	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		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 16:05	7664-41-7	

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ANALYTICAL RESULTS

Project: Bremo_2SA2024_CCR&VSWMR_D
Pace Project No.: 92749754

Sample: 082624NMW28 **Lab ID: 92749754004** Collected: 08/26/24 15:15 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	**9.6**	mg/L	1.0	0.60	1		08/29/24 05:14	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/29/24 05:14	16984-48-8	
Nitrate as N	**0.26**	mg/L	0.10	0.060	1		08/29/24 05:14	14797-55-8	H1
Sulfate	**93.6**	mg/L	2.0	1.0	2		08/29/24 07:40	14808-79-8	M1

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ANALYTICAL RESULTS

Project: Bremo_2SA2024_CCR&VSWMR_D
Pace Project No.: 92749754

Sample: 082724NMW25S **Lab ID: 92749754005** Collected: 08/27/24 13:40 Received: 08/28/24 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	**0.083**	ug/L	0.025	0.0043	1		08/28/24 19:44	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 03:23	7440-36-0	
Arsenic	ND	ug/L	10.0	2.5	1	08/30/24 12:05	09/05/24 03:23	7440-38-2	
Barium	**11.6**	ug/L	5.0	0.79	1	08/30/24 12:05	09/05/24 03:23	7440-39-3	
Beryllium	ND	ug/L	1.0	0.16	1	08/30/24 12:05	09/05/24 03:23	7440-41-7	
Boron	**15.0J**	ug/L	50.0	4.0	1	08/30/24 12:05	09/05/24 03:23	7440-42-8	
Cadmium	ND	ug/L	1.0	0.29	1	08/30/24 12:05	09/05/24 03:23	7440-43-9	
Calcium	**39400**	ug/L	100	14.7	1	08/30/24 12:05	09/05/24 03:23	7440-70-2	
Chromium	ND	ug/L	5.0	0.63	1	08/30/24 12:05	09/05/24 03:23	7440-47-3	
Copper	**1.2J**	ug/L	5.0	0.62	1	08/30/24 12:05	09/05/24 03:23	7440-50-8	
Molybdenum	ND	ug/L	5.0	2.6	1	08/30/24 12:05	09/05/24 03:23	7439-98-7	
Nickel	**0.94J**	ug/L	5.0	0.88	1	08/30/24 12:05	09/05/24 03:23	7440-02-0	
Selenium	ND	ug/L	10.0	4.1	1	08/30/24 12:05	09/05/24 03:23	7782-49-2	
Silver	**2.2J**	ug/L	5.0	0.49	1	08/30/24 12:05	09/05/24 03:23	7440-22-4	
Hardness, Total(SM 2340B)	**138000**	ug/L	662	36.8	1	08/30/24 12:05	09/05/24 03:23		
Vanadium	ND	ug/L	5.0	1.6	1	08/30/24 12:05	09/05/24 03:23	7440-62-2	
Zinc	ND	ug/L	10.0	3.0	1	08/30/24 12:05	09/05/24 03:23	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Cobalt	**1.9**	ug/L	1.0	0.14	1	08/30/24 12:00	09/04/24 00:58	7440-48-4	
Iron	**331**	ug/L	20.0	3.0	1	08/30/24 12:00	09/04/24 00:58	7439-89-6	
Lead	ND	ug/L	1.0	0.18	1	08/30/24 12:00	09/04/24 00:58	7439-92-1	
Lithium	**0.90J**	ug/L	2.5	0.33	1	08/30/24 12:00	09/04/24 00:58	7439-93-2	
Manganese	**83.5**	ug/L	2.0	0.24	1	08/30/24 12:00	09/04/24 00:58	7439-96-5	
Thallium	ND	ug/L	0.20	0.028	1	08/30/24 12:00	09/04/24 00:58	7440-28-0	
Tin	**0.16J**	ug/L	1.0	0.14	1	08/30/24 12:00	09/04/24 00:58	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 12:39	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**222**	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	ND	mg/L	0.10	0.031	1		09/09/24 18:15	7664-41-7	

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ANALYTICAL RESULTS

Project: Bremo_2SA2024_CCR&VSWMR_D
Pace Project No.: 92749754

Sample: 082724NMW25S **Lab ID: 92749754005** Collected: 08/27/24 13:40 Received: 08/28/24 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	**8.4**	mg/L	1.0	0.60	1		08/29/24 09:11	16887-00-6	
Fluoride	**0.072J**	mg/L	0.10	0.050	1		08/29/24 09:11	16984-48-8	
Nitrate as N	ND	mg/L	0.10	0.060	1		08/29/24 09:11	14797-55-8	
Sulfate	**15.6**	mg/L	1.0	0.50	1		08/29/24 09:11	14808-79-8	

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ANALYTICAL RESULTS

Project: Bremo_2SA2024_CCR&VSWMR_D
Pace Project No.: 92749754

Sample: 082724NMW27S **Lab ID: 92749754006** Collected: 08/27/24 15:15 Received: 08/28/24 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	**0.93**	ug/L	0.12	0.022	5		08/29/24 00:59	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 03:26	7440-36-0	
Arsenic	ND	ug/L	10.0	2.5	1	08/30/24 12:05	09/05/24 03:26	7440-38-2	
Barium	**77.3**	ug/L	5.0	0.79	1	08/30/24 12:05	09/05/24 03:26	7440-39-3	
Beryllium	ND	ug/L	1.0	0.16	1	08/30/24 12:05	09/05/24 03:26	7440-41-7	
Boron	**1410**	ug/L	50.0	4.0	1	08/30/24 12:05	09/05/24 03:26	7440-42-8	
Cadmium	ND	ug/L	1.0	0.29	1	08/30/24 12:05	09/05/24 03:26	7440-43-9	
Calcium	**117000**	ug/L	1000	147	10	08/30/24 12:05	09/05/24 10:59	7440-70-2	
Chromium	ND	ug/L	5.0	0.63	1	08/30/24 12:05	09/05/24 03:26	7440-47-3	
Copper	**0.83J**	ug/L	5.0	0.62	1	08/30/24 12:05	09/05/24 03:26	7440-50-8	
Molybdenum	ND	ug/L	5.0	2.6	1	08/30/24 12:05	09/05/24 03:26	7439-98-7	
Nickel	**1.6J**	ug/L	5.0	0.88	1	08/30/24 12:05	09/05/24 03:26	7440-02-0	
Selenium	ND	ug/L	10.0	4.1	1	08/30/24 12:05	09/05/24 03:26	7782-49-2	
Silver	**2.5J**	ug/L	5.0	0.49	1	08/30/24 12:05	09/05/24 03:26	7440-22-4	
Hardness, Total(SM 2340B)	**505000**	ug/L	6620	368	10	08/30/24 12:05	09/05/24 10:59		
Vanadium	**4.2J**	ug/L	5.0	1.6	1	08/30/24 12:05	09/05/24 03:26	7440-62-2	
Zinc	ND	ug/L	10.0	3.0	1	08/30/24 12:05	09/05/24 03:26	7440-66-6	
6020 MET ICPMS	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Asheville								
Cobalt	**0.15J**	ug/L	1.0	0.14	1	08/30/24 12:00	09/04/24 01:02	7440-48-4	
Iron	**27.9**	ug/L	20.0	3.0	1	08/30/24 12:00	09/04/24 01:02	7439-89-6	
Lead	ND	ug/L	1.0	0.18	1	08/30/24 12:00	09/04/24 01:02	7439-92-1	
Lithium	**4.6**	ug/L	2.5	0.33	1	08/30/24 12:00	09/04/24 01:02	7439-93-2	
Manganese	**31.5**	ug/L	2.0	0.24	1	08/30/24 12:00	09/04/24 01:02	7439-96-5	
Thallium	ND	ug/L	0.20	0.028	1	08/30/24 12:00	09/04/24 01:02	7440-28-0	
Tin	ND	ug/L	1.0	0.14	1	08/30/24 12:00	09/04/24 01:02	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 12:41	7439-97-6	
2540C Total Dissolved Solids	Analytical Method: SM 2540C-2015 Pace Analytical Services - Asheville								
Total Dissolved Solids	**663**	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	ND	mg/L	0.10	0.031	1		09/09/24 18:19	7664-41-7	

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ANALYTICAL RESULTS

Project: Bremo_2SA2024_CCR&VSWMR_D
Pace Project No.: 92749754

Sample: 082724NMW27S **Lab ID: 92749754006** Collected: 08/27/24 15:15 Received: 08/28/24 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	**10.8**	mg/L	1.0	0.60	1		08/29/24 10:25	16887-00-6	
Fluoride	ND	mg/L	0.10	0.050	1		08/29/24 10:25	16984-48-8	
Nitrate as N	ND	mg/L	0.10	0.060	1		08/29/24 10:25	14797-55-8	
Sulfate	**155**	mg/L	3.0	1.5	3		08/29/24 12:24	14808-79-8	

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QUALITY CONTROL DATA

Project: Bremo_2SA2024_CCR&VSWMR_D
Pace Project No.: 92749754

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: 92749754001, 92749754002, 92749754003, 92749754004

METHOD BLANK: 4524620 Matrix: Water
Associated Lab Samples: 92749754001, 92749754002, 92749754003, 92749754004

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_D
Pace Project No.: 92749754

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: 92749754005, 92749754006

METHOD BLANK: 4526180 Matrix: Water
Associated Lab Samples: 92749754005, 92749754006

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_D
Pace Project No.: 92749754

QC Batch: 880526
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92749754001, 92749754002, 92749754003, 92749754004

METHOD BLANK: 4534642 Matrix: Water
Associated Lab Samples: 92749754001, 92749754002, 92749754003, 92749754004

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_D
Pace Project No.: 92749754

QC Batch: 880762
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470 Mercury
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92749754005, 92749754006

METHOD BLANK: 4536079 Matrix: Water
Associated Lab Samples: 92749754005, 92749754006

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_D
Pace Project No.: 92749754

QC Batch: 879094
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92749754001, 92749754002, 92749754003, 92749754004

METHOD BLANK: 4527741 Matrix: Water
Associated Lab Samples: 92749754001, 92749754002, 92749754003, 92749754004

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_D
Pace Project No.: 92749754

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_D
Pace Project No.: 92749754

QC Batch: 879448
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92749754005, 92749754006

METHOD BLANK: 4529738 Matrix: Water
Associated Lab Samples: 92749754005, 92749754006

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_D
Pace Project No.: 92749754

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_D
Pace Project No.: 92749754

QC Batch: 879095
QC Batch Method: EPA 3010A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92749754001, 92749754002, 92749754003, 92749754004

METHOD BLANK: 4527745 Matrix: Water
Associated Lab Samples: 92749754001, 92749754002, 92749754003, 92749754004

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_D
Pace Project No.: 92749754

QC Batch: 879461
QC Batch Method: EPA 3010A
Analysis Method: EPA 6020B
Analysis Description: 6020 MET
Laboratory: Pace Analytical Services - Asheville
Associated Lab Samples: 92749754005, 92749754006

METHOD BLANK: 4529776 Matrix: Water
Associated Lab Samples: 92749754005, 92749754006

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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(704)875-9092

QUALITY CONTROL DATA

Project: Bremo_2SA2024_CCR&VSWMR_D
Pace Project No.: 92749754

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_D
Pace Project No.: 92749754

QC Batch: 879383 | 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: 92749754001, 92749754002, 92749754003, 92749754004, 92749754005, 92749754006

METHOD BLANK: 4529543 Matrix: Water
Associated Lab Samples: 92749754001, 92749754002, 92749754003, 92749754004, 92749754005, 92749754006

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_D
Pace Project No.: 92749754

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: 92749754001, 92749754002, 92749754003

METHOD BLANK: 4534311 Matrix: Water
Associated Lab Samples: 92749754001, 92749754002, 92749754003

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_D
Pace Project No.: 92749754

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: 92749754004

METHOD BLANK: 4534692 Matrix: Water
Associated Lab Samples: 92749754004

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_D
Pace Project No.: 92749754

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: 92749754005

METHOD BLANK: 4536523 Matrix: Water
Associated Lab Samples: 92749754005

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_D
Pace Project No.: 92749754

QC Batch: 881063
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: 92749754006

METHOD BLANK: 4537716 Matrix: Water
Associated Lab Samples: 92749754006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	ND	0.10	0.031	09/09/24 18:16	

LABORATORY CONTROL SAMPLE: 4537717

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	5	5.2	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4537718 4537719

Parameter	Units	92749754006 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	103	102	90-110	0	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4537720 4537721

Parameter	Units	92750052001 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	28.8	5	5	36.1	36.2	146	148	90-110	0	10	M1

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QUALITY CONTROL DATA

Project: Bremo_2SA2024_CCR&VSWMR_D
Pace Project No.: 92749754

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: 92749754001, 92749754002, 92749754003, 92749754004

METHOD BLANK: 4527134 Matrix: Water
Associated Lab Samples: 92749754001, 92749754002, 92749754003, 92749754004

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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QUALITY CONTROL DATA

Project: Bremo_2SA2024_CCR&VSWMR_D
Pace Project No.: 92749754

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: 92749754005, 92749754006

METHOD BLANK: 4527763 Matrix: Water
Associated Lab Samples: 92749754005, 92749754006

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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QUALIFIERS

Project: Bremo_2SA2024_CCR&VSWMR_D
Pace Project No.: 92749754

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_D
Pace Project No.: 92749754

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92749754001	**082624NMW25D**	EPA 7199	878479		
92749754002	**082624NMW26S**	EPA 7199	878479		
92749754003	**082624NMW26D**	EPA 7199	878479		
92749754004	**082624NMW28**	EPA 7199	878479		
92749754005	**082724NMW25S**	EPA 7199	878793		
92749754006	**082724NMW27S**	EPA 7199	878793		
92749754001	**082624NMW25D**	EPA 3010A	879094	EPA 6010D	879275
92749754002	**082624NMW26S**	EPA 3010A	879094	EPA 6010D	879275
92749754003	**082624NMW26D**	EPA 3010A	879094	EPA 6010D	879275
92749754004	**082624NMW28**	EPA 3010A	879094	EPA 6010D	879275
92749754005	**082724NMW25S**	EPA 3010A	879448	EPA 6010D	879619
92749754006	**082724NMW27S**	EPA 3010A	879448	EPA 6010D	879619
92749754001	**082624NMW25D**	EPA 3010A	879095	EPA 6020B	879262
92749754002	**082624NMW26S**	EPA 3010A	879095	EPA 6020B	879262
92749754003	**082624NMW26D**	EPA 3010A	879095	EPA 6020B	879262
92749754004	**082624NMW28**	EPA 3010A	879095	EPA 6020B	879262
92749754005	**082724NMW25S**	EPA 3010A	879461	EPA 6020B	879609
92749754006	**082724NMW27S**	EPA 3010A	879461	EPA 6020B	879609
92749754001	**082624NMW25D**	EPA 7470A	880526	EPA 7470A	880793
92749754002	**082624NMW26S**	EPA 7470A	880526	EPA 7470A	880793
92749754003	**082624NMW26D**	EPA 7470A	880526	EPA 7470A	880793
92749754004	**082624NMW28**	EPA 7470A	880526	EPA 7470A	880793
92749754005	**082724NMW25S**	EPA 7470A	880762	EPA 7470A	880915
92749754006	**082724NMW27S**	EPA 7470A	880762	EPA 7470A	880915
92749754001	**082624NMW25D**	SM 2540C-2015	879383		
92749754002	**082624NMW26S**	SM 2540C-2015	879383		
92749754003	**082624NMW26D**	SM 2540C-2015	879383		
92749754004	**082624NMW28**	SM 2540C-2015	879383		
92749754005	**082724NMW25S**	SM 2540C-2015	879383		
92749754006	**082724NMW27S**	SM 2540C-2015	879383		
92749754001	**082624NMW25D**	EPA 350.1 Rev 2.0 1993	880438		
92749754002	**082624NMW26S**	EPA 350.1 Rev 2.0 1993	880438		
92749754003	**082624NMW26D**	EPA 350.1 Rev 2.0 1993	880438		
92749754004	**082624NMW28**	EPA 350.1 Rev 2.0 1993	880535		
92749754005	**082724NMW25S**	EPA 350.1 Rev 2.0 1993	880844		
92749754006	**082724NMW27S**	EPA 350.1 Rev 2.0 1993	881063		
92749754001	**082624NMW25D**	EPA 9056A	878974		
92749754002	**082624NMW26S**	EPA 9056A	878974		
92749754003	**082624NMW26D**	EPA 9056A	878974		
92749754004	**082624NMW28**	EPA 9056A	878974		
92749754005	**082724NMW25S**	EPA 9056A	879107		
92749754006	**082724NMW27S**	EPA 9056A	879107		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Bremo_2SA2024_CCR&VSWMR_D
Pace Project No.: 92749754

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch

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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# : 92749754

92749754

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: GM 8/27/24

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

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

Thermometer: ☑ IR Gun ID: 97307e **Type of Ice:** ☑ Wet ☐ Blue ☐ None

Cooler Temp: 2.3, 0.8, 1.1, 1.3, 3.1 **Correction Factor:** Add/Subtract (°C) 0

Cooler Temp Corrected (°C): 2.3, 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#: 92749754

PM: AMB Due Date: 09/11/24

CLIENT: 92-DomEnergy

Laboratory Receiving Location: Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mech... ☐ 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)	DG9Y-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 ✓	1 ✓																				1 ✓			
2		1	1		2	1 ✓	1 ✓																				1 ✓			
3		1	1		2	1 ✓	1 ✓																				1 ✓			
4		1	1		2	1 ✓	1 ✓																				1 ✓			
5																														
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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#: 92749754

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
25D	CMH	9.0				
26S		9.0				
26D		9.1				
28		8.9	9.2	8/27/24 10:30	2 base	225312

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
Customer Project #:		Cc E-Mail:	crystal.shadle@wsp.com
Project Name:	Bremo_25A2024_CCR&VSWMR_D	Invoice To:	Kelly Hicks
Site Collection Info/Facility ID (as applicable):		Invoice E-Mail:	kelly.a.hicks@dominionenergy.com
		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

Analysis Requested: 2540C Total Dissolved Solids; 350.1 Ammonia; 8010/6020/7470 Metals + Hardness; 7199 Chromium, Hexavalent; 9056 IC - Cl/Fl/SO4/NO3; RADS 226/228

**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 3146514

Preservation non-conformance identified for sample.

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	Sample Comment
~~08_24NMW25S~~	~~WT~~									JD 8/26/24
08_24NMW25D	WT	G			08/26/24	1530	7			* ALL SAMPLES
08_24NMW26S	WT	G			08/26/24	1400	7			PRESERVED
08_24NMW26D	WT	G			08/26/24	1310	7			ON ICE *
~~08_24NMW27S~~	~~WT~~									JD 8/26/24
08_24NMW28	WT	G			08/26/24	1515	7			Tracking #s:
										8184 0816 3134
										8184 0816 3070
										8184 0816 3069

Additional Instructions from Pace®:

COC ID: Bremo-25A2024-CCR-VSWMR-D_1_1

Collected By: (Printed Name) Z. Mondshine / 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)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Tracking Number:
WSP	08/26/24 1755		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/

Pace Analytical Services

Receipt

Effective Date: 5/24/2024

Laboratory receiving samples:

Asheville ☐ **Eden** ☐ **Greenwood** ☐ **Huntersville** ☑ **Raleigh** ☐ **Mechanicsville** ☐ **Atlanta** ☐ **Kernersville** ☐

Sample Condition Upon Receipt

Client Name: Dominion Energy

Project # WO# : 92749754

92749754

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

Carrier Tracking Number: _____

Custody Seal Present? ☑ Yes ☐ No **Seals Intact?** ☑ Yes ☐ No **Date/Initials Person Examining Contents:** APC 4-28-24

Packing Material: ☑ Bubble Wrap ☐ Bubble Bags ☑ None NWG-28 ☐ Other **Biological Tissue Frozen?** ☐ Yes ☐ No ☑ N/A

Thermometer: ☐ IR Gun ID: 92-T076 **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:** _____

Qualtrax Document ID: 70677

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#: 92749754

PM: AMB **Due Date: 09/11/24**

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		1	1		1	1																			2	1 ✓			
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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_D	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
0827-24NMW25S	WT	G			08/27/24	1340	7			X	X	X	X	X	X					* ALL SAMPLES
~~08-24NMW25D~~	~~WT~~									X	X	X	X	X	X	3D				PRESERVED
~~08-24NMW26S~~	~~WT~~									X	X	X	X	X	X	3D				ON ICE *
~~08-24NMW26D~~	~~WT~~									X	X	X	X	X	X					
0827-24NMW27S	WT	G			08/27/24	1515	7			X	X	X	X	X	X					Fedex Shipping
~~08-24NMW28~~	~~WT~~									X	X	X	X	X	X	3D				8184 0816 3575
																				8184 0816 3584
																				8184 0816 3085

Proj. Mgr: Angela Baioni
AcctNum / Client ID:
Table #:
Profile / Template: 13861
Prelog / Bottle Ord. ID: EZ 3146514
Lab Use Only
Preservation non-conformance identified for sample.

Additional Instructions from Pace®:

COC ID: Bremo_2SA2024_CCR+VSWMR_D_2_2

Collected By:
(Printed Name) Zoey Mondshine, 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)	Date/Time: 03/27/24 1835	Received by/Company: (Signature)	Date/Time: 4-28-24 1005	Tracking Number:	
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 #

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
255	GMM	9.2				
275		8.9	9.0	11:40	base 1	225312

ANALYTICAL REPORT

September 30, 2024

Pace Analytical - Huntersville, NC

Sample Delivery Group:	L1773898
Samples Received:	09/04/2024
Project Number:	9274954
Description:	Bremo_2SA2024_CCR&CCR&VSWMR_D
Site:	001
Report To:	Angela Baioni 9800 Kincey Avenue, Suite 100 Huntersville, NC 28078

Entire Report Reviewed By:

Nancy McLain
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.

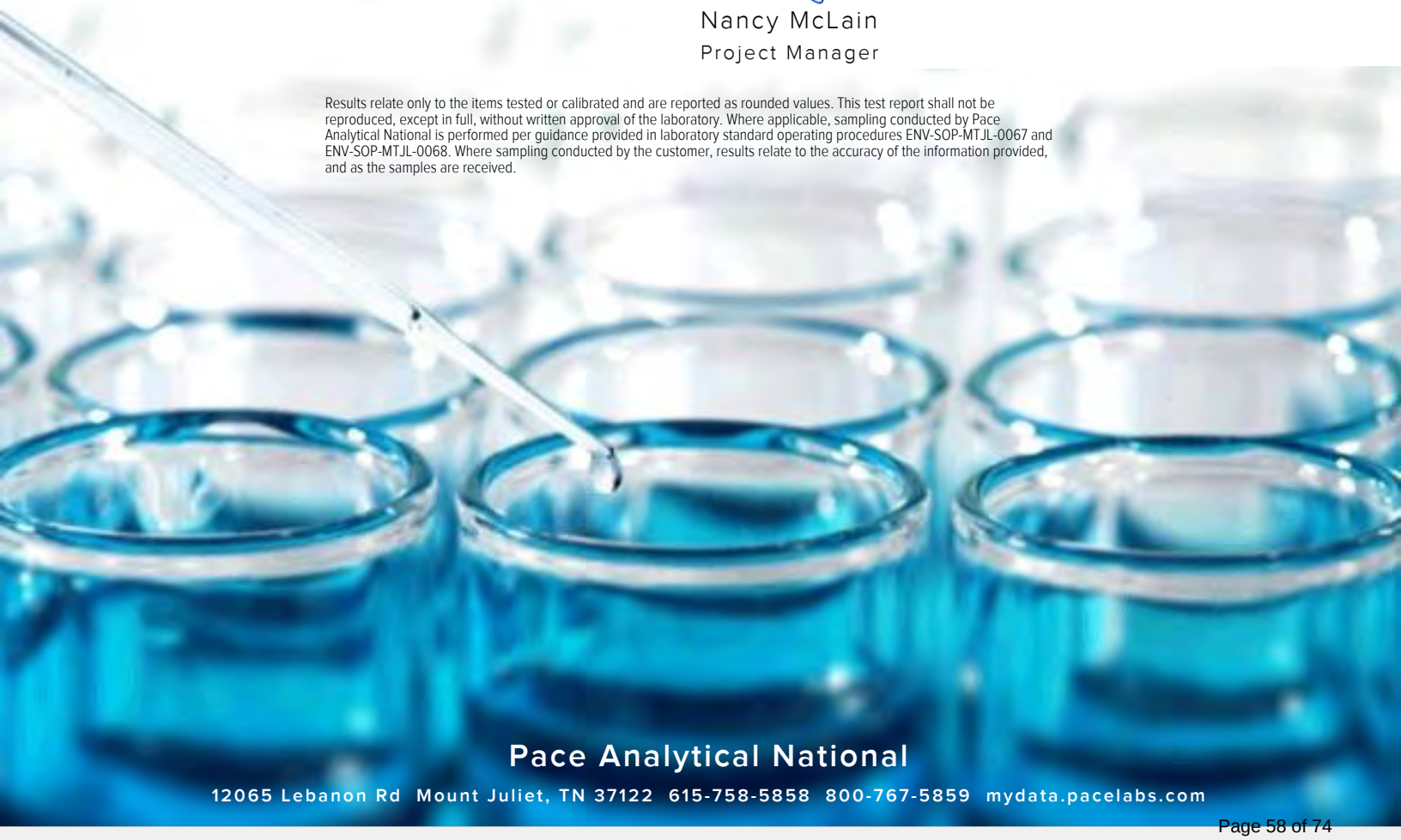


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082624NMW25D L1773898-01 Non-Potable Water

Collected by	Collected date/time	Received date/time
	08/26/24 15:30	09/04/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 903.0/9315	WG2356087	1	09/05/24 10:04	09/14/24 09:35	ASN	Mt. Juliet, TN
Radiochemistry by Method 904/9320	WG2356240	1	09/04/24 23:00	09/17/24 21:17	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2356087	1	09/05/24 10:04	09/17/24 21:17	DDD	Mt. Juliet, TN

082624NMW26S L1773898-02 Non-Potable Water

Collected by	Collected date/time	Received date/time
	08/26/24 14:00	09/04/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 903.0/9315	WG2356087	1	09/05/24 10:04	09/14/24 10:35	ASN	Mt. Juliet, TN
Radiochemistry by Method 904/9320	WG2356240	1	09/04/24 23:00	09/17/24 21:17	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2356087	1	09/05/24 10:04	09/17/24 21:17	DDD	Mt. Juliet, TN

082624NMW26D L1773898-03 Non-Potable Water

Collected by	Collected date/time	Received date/time
	08/26/24 13:10	09/04/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 903.0/9315	WG2356087	1	09/05/24 10:04	09/14/24 10:35	ASN	Mt. Juliet, TN
Radiochemistry by Method 904/9320	WG2356240	1	09/04/24 23:00	09/17/24 21:17	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2356087	1	09/05/24 10:04	09/17/24 21:17	DDD	Mt. Juliet, TN

082624NMW28 L1773898-04 Non-Potable Water

Collected by	Collected date/time	Received date/time
	08/26/24 15:15	09/04/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 903.0/9315	WG2356087	1	09/05/24 10:04	09/14/24 10:35	ASN	Mt. Juliet, TN
Radiochemistry by Method 904/9320	WG2356242	1	09/05/24 21:00	09/18/24 17:12	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2356087	1	09/05/24 10:04	09/18/24 17:12	DDD	Mt. Juliet, TN

082724NMW25S L1773898-05 Non-Potable Water

Collected by	Collected date/time	Received date/time
	08/27/24 13:40	09/04/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 903.0/9315	WG2356087	1	09/05/24 10:04	09/14/24 10:35	ASN	Mt. Juliet, TN
Radiochemistry by Method 904/9320	WG2356242	1	09/05/24 21:00	09/18/24 17:12	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2356087	1	09/05/24 10:04	09/18/24 17:12	DDD	Mt. Juliet, TN

082724NMW27S L1773898-06 Non-Potable Water

Collected by	Collected date/time	Received date/time
	08/27/24 15:15	09/04/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 903.0/9315	WG2356087	1	09/05/24 10:04	09/14/24 11:35	ASN	Mt. Juliet, TN
Radiochemistry by Method 904/9320	WG2356242	1	09/05/24 21:00	09/18/24 17:12	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2356087	1	09/05/24 10:04	09/18/24 17:12	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.



Nancy McLain
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	0.731		0.294	0.438	0.300	0.114	09/14/2024 09:35	WG2356087
(T) Barium	*98.7*					*30.0-143*	*09/14/2024 09:35*	WG2356087

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	0.551		0.278	0.476	0.500	0.260	09/17/2024 21:17	WG2356240
(T) Barium	*123*					*30.0-143*	*09/17/2024 21:17*	WG2356240
(T) Yttrium	*103*					*30.0-136*	*09/17/2024 21:17*	WG2356240

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.28		0.405	0.583	09/17/2024 21:17	WG2356087

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	0.312		0.194	0.336	0.230	0.0791	09/14/2024 10:35	WG2356087
(T) Barium	*101*					*30.0-143*	*09/14/2024 10:35*	WG2356087

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	-0.639	U	0.281	0.481	0.536	0.279	09/17/2024 21:17	WG2356240
(T) Barium	*134*					*30.0-143*	*09/17/2024 21:17*	WG2356240
(T) Yttrium	*98.2*					*30.0-136*	*09/17/2024 21:17*	WG2356240

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.312	J	0.341	0.583	09/17/2024 21:17	WG2356087

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	0.313		0.194	0.337	0.231	0.0794	09/14/2024 10:35	WG2356087
(T) Barium	*100*					*30.0-143*	*09/14/2024 10:35*	WG2356087

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	-0.157	U	0.254	0.452	0.475	0.248	09/17/2024 21:17	WG2356240
(T) Barium	*132*					*30.0-143*	*09/17/2024 21:17*	WG2356240
(T) Yttrium	*103*					*30.0-136*	*09/17/2024 21:17*	WG2356240

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.313	J	0.320	0.528	09/17/2024 21:17	WG2356087

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	0.361		0.194	0.337	0.184	0.0561	09/14/2024 10:35	WG2356087
(T) Barium	*103*					*30.0-143*	*09/14/2024 10:35*	WG2356087

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	0.740		0.268	0.485	0.480	0.251	09/18/2024 17:12	WG2356242
(T) Barium	*125*					*30.0-143*	*09/18/2024 17:12*	WG2356242
(T) Yttrium	*84.9*					*30.0-136*	*09/18/2024 17:12*	WG2356242

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.10		0.331	0.514	09/18/2024 17:12	WG2356087

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	0.216	J	0.194	0.336	0.295	0.112	09/14/2024 10:35	WG2356087
(T) Barium	*102*					*30.0-143*	*09/14/2024 10:35*	WG2356087

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	0.721		0.239	0.437	0.425	0.222	09/18/2024 17:12	WG2356242
(T) Barium	*123*					*30.0-143*	*09/18/2024 17:12*	WG2356242
(T) Yttrium	*107*					*30.0-136*	*09/18/2024 17:12*	WG2356242

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.937		0.308	0.517	09/18/2024 17:12	WG2356087

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	0.304		0.223	0.384	0.291	0.100	09/14/2024 11:35	WG2356087
(T) Barium	*78.9*					*30.0-143*	*09/14/2024 11:35*	WG2356087

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	1.45		0.267	0.465	0.458	0.239	09/18/2024 17:12	WG2356242
(T) Barium	*102*					*30.0-143*	*09/18/2024 17:12*	WG2356242
(T) Yttrium	*114*					*30.0-136*	*09/18/2024 17:12*	WG2356242

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.75		0.348	0.543	09/18/2024 17:12	WG2356087

QUALITY CONTROL SUMMARY

L1773898-01,02,03,04,05,06

Method Blank (MB)

(MB) R4120397-1 09/14/24 06:34

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-226	0.0121	U	0.0710	0.149	0.0564
(T) Barium	*104*		*104*		

L1772580-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1772580-01 09/14/24 08:34 • (DUP) R4120397-5 09/14/24 07:34

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	0.244	0.179	0.234	0.0806	0.500	0.416	0.615	0.233	68.7	0.565	J	20	3
(T) Barium	*98.5*				*96.5*	*96.5*							

Laboratory Control Sample (LCS)

(LCS) R4120397-2 09/14/24 07:34

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-226	5.00	5.35	107	75.0-125	
(T) Barium			*102*		

L1773890-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1773890-02 09/14/24 08:34 • (MS) R4120397-3 09/14/24 07:34 • (MSD) R4120397-4 09/14/24 07:34

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	0.290	19.5	19.0	96.3	93.6	1	75.0-125			2.80		20
(T) Barium		*100*			*106*	*110*							

Method Blank (MB)

(MB) R4122140-1 09/17/24 21:17

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-228	0.257	J	0.170	0.309	0.162
(T) Barium	*130*		*130*		
(T) Yttrium	*97.9*		*97.9*		

L1772807-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1772807-01 09/17/24 21:17 • (DUP) R4122140-5 09/17/24 21:17

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	0.507	0.240	0.433	0.231	0.334	0.297	0.547	0.289	41.3	0.454	J	20	3
(T) Barium	*107*				*123*	*123*							
(T) Yttrium	*103*				*90.9*	*90.9*							

Laboratory Control Sample (LCS)

(LCS) R4122140-2 09/17/24 21:17

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	4.23	84.6	80.0-120	
(T) Barium			*128*		
(T) Yttrium			*98.9*		

L1773890-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1773890-02 09/17/24 21:17 • (MS) R4122140-3 09/17/24 21:17 • (MSD) R4122140-4 09/17/24 21:17

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	1.24	14.4	14.3	78.9	77.9	1	70.0-130			1.19		20
(T) Barium		*125*			*125*	*135*							
(T) Yttrium		*104*			*97.0*	*109*							

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	LAO00356
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.

F033

Internal Transfer Chain of Custody

Pace

☐ Rush Multiplier____X
☐ Samples Pre-Logged into eCOC

State Of Origin: VA
Cert. Needed: [X] Yes ☐ No

Workorder: 92749754 Workorder Name: Bremo_2SA2024_CCR&VSWMR_D 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	082624NMW25D	PS	8/26/2024 15:30	92749754001	Water	2						X	X											01
2	082624NMW26S	PS	8/26/2024 14:00	92749754002	Water	2						X	X											02
3	082624NMW26D	PS	8/26/2024 13:10	92749754003	Water	2						X	X											03
4	082624NMW28	PS	8/26/2024 15:15	92749754004	Water	2						X	X											04
5	082724NMW25S	PS	8/27/2024 13:40	92749754005	Water	2						X	X											05
6	082724NMW27S	PS	8/27/2024 15:15	92749754006	Water	2						X	X											06

L1773895

Transfers	Released By	Date/Time	Received By	Date/Time
1	ATHENA, PAC	9/3/24 8:00		
2				
3			Christopher M. Collins	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:	X 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	12 TOTAL	
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 # 92749754
(To be completed by sending lab)

Sending Project No:	92749754
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	6	SI-38RAD	SUB PASI RAD
Ra 228/904.0 + Combined Ra	BP1N		HNO3	6	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
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(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.

REPORT OF LABORATORY ANALYSIS

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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

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(704)875-9092

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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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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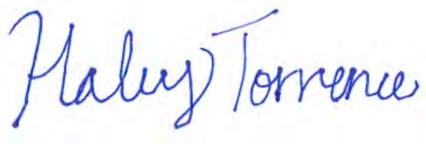
Sc: Sample Chain of Custody 10

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.

`

APPENDIX F

HISTORICAL LABORATORY DETECTIONS

Appendix F
Historical Laboratory Detections
Bremo Power Station, North Pond
Permit No. 618

		Location	MW-11	MW-29S	MW-29D	MW-24	MW-25S	MW-25D	MW-26S	MW-26D	MW-27S	MW-27D	MW-28	MW-33	MW-34	MW-35	Field Blank
Sample Date	**Method**	**Unit**															
Ammonia																	
09/09-13/2019	E350.1	mg/L	< 0.070 U	< 0.070 U	0.13	1.4	< 0.070 U	< 0.070 U	< 0.070 U	< 0.070 U	< 0.070 U	< 0.070 U	< 0.070 U	< 0.070 U	< 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	1.5	< 0.070 U	< 0.070 U	< 0.070 U	0.13	< 0.070 U	< 0.070 U	< 0.070 U	< 0.070 U	< 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	1.3	< 0.070 U	< 0.070 U	< 0.070 U	0.080 J	< 0.070 U	< 0.070 U	< 0.070 U	< 0.070 U	< 0.070 U	< 0.070 U	< 0.070 U
02/23-25/2021	E350.1	mg/L	< 0.070 U	< 0.070 U	< 0.070 U	0.72	< 0.070 U	< 0.070 U	< 0.070 U	< 0.070 U	< 0.070 U	< 0.070 U	< 0.070 U	< 0.070 U	< 0.070 U	< 0.070 U	< 0.070 U
08/30-9/02/2021	E350.1	mg/L	< 0.031 U	< 0.031 U	0.097 J	0.70	< 0.031 U	< 0.031 U	< 0.031 U	0.033 J	< 0.031 U	< 0.031 U	0.032 J	< 0.031 U	< 0.031 U	< 0.031 U	0.042 J
02/07-02/10/2022	E350.1	mg/L	< 0.027 U	< 0.027 U	0.11	0.77	0.14	0.028 J	< 0.027 U	0.12	< 0.027 U	< 0.027 U	< 0.027 U	0.039 J	0.032 J	< 0.027 U	< 0.027 U
08/29-09/07/2022	E350.1	mg/L	< 0.027 U	< 0.027 U	< 0.027 U	0.39	< 0.027 U	< 0.027 U	< 0.027 U	0.055 J	< 0.027 U	< 0.027 U	< 0.027 U	< 0.027 U	< 0.027 U	< 0.027 U	< 0.027 U
02/13-02/15/2023	E350.1	mg/L	< 0.031 U	< 0.031 U	0.095 J	0.63	< 0.031 U	< 0.031 U	< 0.031 U	0.31	< 0.031 U	< 0.031 U	< 0.031 U	< 0.031 U	< 0.031 U	< 0.031 U	< 0.031 U
08/21-08/23/2023	E350.1	mg/L	< 0.031 U	< 0.031 U	0.23	0.72	< 0.031 U	< 0.031 U	< 0.031 U	0.095 J	< 0.031 U	< 0.031 U	< 0.031 U	< 0.031 U	< 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	0.53	< 0.031 U	< 0.031 U	< 0.031 U	0.21	< 0.031 U	< 0.031 U	< 0.031 U	< 0.031 U	0.045 J	< 0.031 U	< 0.031 U
08/26-27/2024	E350.1	mg/L	< 0.031 U	< 0.031 U	0.25	0.46	< 0.031 U	< 0.031 U	< 0.031 U	0.035 J	< 0.031 U	< 0.031 U	< 0.031 U	< 0.031 U	< 0.031 U	< 0.031 U	< 0.0-31 U
Antimony																	
10/27-11/01/2016	SW6020B	µg/L	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	--	--	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 0.1
12/06-07/2016	SW6020B	µg/L	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	1.4 J	< 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	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	1.3 J	< 1.00 U	< 1.00 U	< 0.1 U
02/28-03/02/2017	SW6020B	µg/L	< 1.00 U	< 1.00 U	1.2 J	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	1.2 J	< 1.00 U	< 1.00 U	< 0.1 U
04/10-12/2017	SW6020B	µg/L	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 0.1 U
05/11-12/2017	SW6020B	µg/L	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	1.2 J	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 0.1 U
06/19-20/2017	SW6020B	µg/L	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 0.1 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	1.1 J	< 1.00 U	< 1.00 U	< 0.1 U
07/24-25/2017	SW6020B	µg/L	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 0.1 U
01/29-30/2018	SW6010	µg/L	< 3.90 U	< 3.90 U	< 3.90 U	< 3.90 U	< 3.90 U	--	< 3.90 U	--	< 3.90 U	< 3.90 U	< 3.90 U	< 3.90 U	< 3.90 U	< 3.90 U	< 3.90 U
01/07-18/2019	SW6010D	µg/L	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 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	< 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	< 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	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U
02/23-25/2021	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	3.1 J	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U
08/30-9/02/2021	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	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U
02/07-02/10/2022	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	< 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	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U
02/13-02/15/2023	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	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
08/21-08/23/2023	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	< 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	< 3.6 U	< 3.6 U	< 3.6 U	< 3.6 U	< 3.6 U
08/26-27/2024	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	< 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	< 0.50 U	--	--	< 0.50 U	0.83 J	< 0.50 U	0.89 J	< 0.50 U	0.73 J	< 0.50 U	1.2	< 0.050 U
12/06-07/2016	SW6020B	µg/L	< 0.50 U	< 0.50 U	1.2	0.8 J	< 0.50 U	1.9	< 0.50 U	< 0.50 U	< 0.50 U	1.1	< 0.50 U	< 0.50 U	< 0.50 U	1	< 0.50 U
01/18-19/2017	SW6020B	µg/L	< 0.50 U	< 0.50 U	0.99 J	0.79 J	0.64 J	8.8	< 0.50 U	< 0.50 U	< 0.50 U	1.1	< 0.50 U	< 0.50 U	< 0.50 U	0.72 J	< 0.050 U
02/28-03/02/2017	SW6020B	µg/L	< 0.50 U	< 0.50 U	1.3	0.75 J	0.70 J	7.6	< 0.50 U	< 0.50 U	< 0.50 U	0.77 J	< 0.50 U	< 0.50 U	< 0.50 U	0.74 J	< 0.050 U
04/10-12/2017	SW6020B	µg/L	< 0.50 U	< 0.50 U	3.8	0.62 J	0.96 J	7.5	< 0.50 U	< 0.50 U	< 0.50 U	0.99 J	< 0.50 U	< 0.50 U	< 0.50 U	0.85 J	< 0.050 U
05/11-12/2017	SW6020B	µg/L	< 0.50 U	< 0.50 U	2.4	0.65 J	0.64 J	11.5	< 0.50 U	< 0.50 U	< 0.50 U	0.89 J	< 0.50 U	< 0.50 U	< 0.50 U	0.67 J	< 0.050 U
06/19-20/2017	SW6020B	µg/L	< 0.50 U	< 0.50 U	3	0.75 J	< 0.050 U	4.2	< 0.50 U	< 0.50 U	< 0.50 U	0.67 J	< 0.50 U	< 0.50 U	< 0.50 U	1.1	< 0.050 U
07/24-25/2017	SW6020B	µg/L	< 0.50 U	< 0.50 U	3.2	0.76 J	< 0.50 U	4.7	< 0.50 U	< 0.50 U	< 0.50 U	0.62 J	< 0.50 U	< 0.50 U	< 0.50 U	1	< 0.050 U
01/29-30/2018	SW6020	µg/L	< 0.21 U	< 0.21 U	4.3	0.94	0.54	--	< 0.21 U	--	< 0.21 U	< 0.21 U	< 0.21 U	0.46 J	< 0.21 U	1.9	< 0.21 U
04/30-05/01/2018	SW6010	µg/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	--	--	--	--	--	< 5.0 U	--	< 5.0 U	< 5.0 U	< 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
01/07-18/2019	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	< 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	5.2 J	< 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	7.1 J	< 4.7 U	< 4.7 U	5.2 J	< 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	5.7 J	6.6 J	7.7 J	< 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	4.9 J
02/23-25/2021	SW6010D	µg/L	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	13.8	< 4.7 U	< 4.7 U	< 4.7 U	5.5 J	< 4.7 U	< 4.7 U	9.4 J	< 4.7 U	< 4.7 U
04/16/2021	SW6010D	µg/L	--	--	--	--	--	< 4.7 U	--	--	--	--	--	--	--	--	< 4.7 U
08/30-9/02/2021	SW6010D	µg/L	< 11.4	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 8.8 U	< 6.2	< 4.7 U	< 5.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U
02/07-02/10/2022	SW6010D	µg/L	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	5.4 J	< 4.7 U	< 4.7 U	7.8 J	5.6 J	< 4.7 U	< 4.7 U	< 4.7 U	5.7 J	< 4.7 U
08/29-09/07/2022	SW6010D	µg/L	< 4.7 U	< 4.7 U	5.9 J	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	5.5 J	< 4.7 U	5.4 J	< 4.7 U	4.7 J	< 4.7 U
02/13-02/15/2023	SW6010D	µg/L	< 3.4 U	< 3.4 U	< 3.4 U	< 3.4 U	< 3.4 U	< 4.7 U	< 4.7 U	< 3.4 U	< 3.4 U	< 3.4 U	< 3.4 U	< 3.4 U	< 3.4 U	< 3.4 U	< 3.4 U
08/21-08/23/2023	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	< 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	< 2.5 U	2.5 J	< 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
08/26-27/2024	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	< 2.5 U	< 2.5 U	< 2.5 U	2.5 J	< 2.5 U
Barium																	
10/27-11/01/2016	SW6020B	µg/L	3.6	54	33.5	28.4	--	--	108	312	119	88.5	161	69.6	66.6	128	< 0.11 U
12/06-07/2016	SW6020B	µg/L	3.6	26.9	45.7	36.4	20.8	32.2	40.8	119	95.2	73	70.0	36.4	46.6	112	< 1.10 U
01/18-19/2017	SW6020B	µg/L	3 J	44.3	41.3	47.7	42.4	33.9	45.6	183	106	97.7	86.6	47.2	43.6	111	< 0.11 U
02/28-03/02/2017	SW6020B	µg/L	3.1	45.6	34.2	46.5	37.9	29.6	34.5	183	92.4	74.5	83.0	35.8	43.6	101	0.14 J
04/10-12/2017	SW6020B	µg/L	3	42.4	28.3	45.5	42.4	24.4	40.5	176	94.2	64.8	95.2	42	41.2	118	0.12 J
05/11-12/2017	SW6020B	µg/L	3.2	47.3	35.9	47.5	44.9	46.1	43.2	204	94.9	62.6	87.0	32.6	47	140	< 0.11 U
06/19-20/2017	SW6020B	µg/L	2.1 J	51	35.6	39	3.5	22.8	37.2	207	91.6	55.1	80.3	34	41.2	169	0.11 J
07/24-25/2017	SW6020B	µg/L	3.1	45.8	34.7	48.4	43.5	27.6	39.0	184	67.5	50.2	79.1	27.2	46.8	150	< 0.11 U
01/29-30/2018	SW6010	µg/L	3.5 J	35.6	33.1	49.7	42.8	--	31.8	--	95.9	49	72.7	22.1	42.8	105	< 2.50 U
04/30-05/01/2018	SW6010	µg/L	3.1 J	37.3	27.1	56.6	--	--	--	--	--	39.1	--	23.3	44.4	108	< 2.5 U
10/15-16/2018	SW6010D	µg/L	2.8 J	59.0	33.2	60.0	--	--	--	--	--	23.9	--	37.3	44.2	101	< 2.5 U
01/07-18/2019	SW6010D	µg/L	3.0 J	34.4	29.6	59.3	35.6	25.4	38.5	203	88.1	27.8	71.0	36.5	43.7	114	< 2.5 U
01/07-18/2019	SW6020B	µg/L	2.9	--	--	--	--	--	--	--	--	66.7	--	--	--	--	--
09/09-13/2019	SW6010D	µg/L	2.8 J	29.8	31.9	58.4	27.8	24.9	30.2	192	93.3	33.3	74.4	116	43.3	99.8	< 1.0 U
03/02-05/2020	SW6010D	µg/L	3.5 J	40.3	38.8	224	28.4	26.4	25.8	201	93.3	48.4	52.7	23.7	39.0	112	< 1.0 U
08/24-28/2020	SW6010D	µg/L	3.6 J	40.4	39.6	98.5	24.4	25.6	28.0	196	96.2	33.2	55.6	21.3	41.9	127	< 3.5 U
02/23-25/2021	SW6010D	µg/L	< 3.5 U	30.1	29.8	79.0	17.1	21.4	26.1	173	88.6	24.8	49.0	16.9	39.1	92.6	< 3.5 U
08/30-9/02/2021	SW6010D	µg/L	4.1 J	21.0	32.8	72.8	16.3	18.9	26.7	181	87.7	17.7	53.1	22.1	41.2	84.8	< 3.5U
02/07-02/10/2022	SW6010D	µg/L	< 3.5 U	22.9	31.6	105	18.2	18.4	23.7	170	89.7	17.0	49.8	16.1	39.1	82.8	< 3.5U
08/29-09/07/2022	SW6010D	µg/L	< 3.5 U	23.0	32.6	73.8	15.3	19.0	23.6	178	85.4	19.2	51.2	19.2	40.2	94.1	< 3.5 U
02/13-02/15/2023	SW6010D	µg/L	3.2 J	31.6	62.6	86.3	13.4	17.1	24.4	170	80.0	20.9	44.8	18.0	44.9	91.8	< 0.84 U
08/21-08/23/2023	SW6010D	µg/L	< 3.5 U	17.4	33.7	77.0	16.1	17.0	20.0	167	79.9	20.7	46.0	17.1	39.9	89.8	< 3.5 U
02/12-14/2024	SW6010D	µg/L	3.3 J	16.5	33.7	69.4	18.1	31.9	20.7	198	85.6	22.4	42.6	15.7	40.8	77.2	< 0.79 U
08/26-27/2024	SW6010D	µg/L	3.0 J	16.6	33.8	75.1	11.6	21.2	18.3	162	77.3	18.1	46.3	16.4	42.0	80.6	< 0.79 U
Beryllium																	
10/27-11/01/2016	SW6020B	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	< 0.20 U	< 0.20 U	< 0.02 U
12/06-07/2016	SW6020B	µg/L	< 0.20 U	< 0.20 U	0.35 J	0.22 J	< 0.20 U	< 0.20 U	0.31 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
01/18-19/2017	SW6020B	µg/L	< 0.20 U	< 0.20 U	0.21 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	< 0.20 U	< 0.20 U	< 0.20 U	< 0.02 U
02/28-03/02/2017	SW6020B	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	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.02 U
04/10-12/2017	SW6020B	µg/L	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	0.28 J	< 0.20 U	0.26 J	0.22 J	< 0.20 U	< 0.20 U	< 0.20 U	0.28 J	< 0.20 U	0.21 J	< 0.02 U
05/11-12/2017	SW6020B	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	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.02 U
06/19-20/2017	SW6020B	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	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.02 U
07/24-25/2017	SW6020B	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	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.02 U
01/29-30/2018	SW6010	µg/L	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	--	1.7	--	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
01/07-18/2019	SW6010D	µg/L	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 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	< 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	< 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	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U
02/23-25/2021	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	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U
08/30-9/02/2021	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	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U
02/07-02/10/2022	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	< 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	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U
02/13-02/15/2023	SW6010D	µg/L	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U
08/21-08/23/2023	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	< 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	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U
08/26-27/2024	SW6010D	µg/L	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 0.16 U	< 1.0 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	130 J	--	--	26.9 J	53.1 J	1570	82.7 J	2200	467	1230	528	2.2 J
12/06-07/2016	SW6020B	µg/L	15 B	< 5.7 U	64.9 J	141 J	< 5.7 U	6.2 B	< 5.7 U	< 5.7 U	1320	92.4 J	840	319	1210	322	9.2 J
01/18-19/2017	SW6020B	µg/L	< 5.7 U	< 5.7 U	60.7 J	127 J	11.2 B	35.2 J	< 5.7 U	< 5.7 U	1700	136 J	1100	344	1160	265	< 0.57 U
02/28-03/02/2017	SW6020B	µg/L	14.4 J	8.5 J	33.8 J	115 J	27.8 J	36.3 J	5.8 J	20.7 J	1510	158 J	1090	260	1110	263	< 0.57 U
04/10-12/2017	SW6020B	µg/L	< 5.7 U	9.5 J	51.7 J+	112 J	43.1 J+	34 J+	10 J	34.6 J	1600	196 J+	1090	253	1150	273	1.5 J
05/11-12/2017	SW6020B	µg/L	6 J	36.7 J+	45.8 J+	159 J+	47.3 J+	27.4 J+	13.5 J	38.9 J	1680	272 J+	1110	233 J	1160	287	0.86 J
06/19-20/2017	SW6010	µg/L	< 25 U	< 25 U	37.2 J	162	32 J	< 25 U	< 25 U	< 25 U	1740	499	1110	231	1180	298	< 25 U
07/24-25/2017	SW6010	µg/L	< 25 U	< 25 U	29.4 J	173	< 25 U	< 25 U	< 25 U	< 25 U	1670	519	1090	215	1170	296	< 25 U

Appendix F
Historical Laboratory Detections
Bremo Power Station, North Pond
Permit No. 618

		Location	MW-11	MW-29S	MW-29D	MW-24	MW-25S	MW-25D	MW-26S	MW-26D	MW-27S	MW-27D	MW-28	MW-33	MW-34	MW-35	Field Blank
Sample Date	**Method**	**Unit**															
Boron (continued)																	
09/06/2017	SW6010	µg/L	< 25 U	< 25 U	34.6 J	154	--	--	--	--	--	508	--	216	1150	244	< 25 U
04/30-05/01/2018	SW6010	µg/L	< 25 U	< 25 U	54	170	--	--	--	--	--	960	--	220	1200	280	< 25 U
10/15-16/2018	SW6010D	µg/L	< 25 U	< 25 U	45 J	160	--	--	--	--	--	1300	--	220	1200	410	< 25 U
01/07-18/2019	SW6010D	µg/L	< 25 U	< 25 U	40 J	170	28 J	32 J	< 25 U	< 25 U	1600	1200	1020	210	1200	410	< 25 U
09/09-13/2019	SW6010D	µg/L	< 6.6 U	< 6.6 U	44 J	170	32 J	38 J	7.7 J	9.4 J	1600	1300	1000	390 J+	1200	440	43 J
03/02-05/2020	SW6010D	µg/L	< 6.6 U	< 6.6 U	44 J	200	27 J	35 J	< 6.6 U	7.7 J	1600	1300	580	230	1200	490	< 6.6 U
08/24-28/2020	SW6010D	µg/L	< 32.4 U	< 32.4 U	46.8 J	205	< 32.4 U	34.6 J	< 32.4 U	< 32.4 U	1580	1330	512	256	1240	533	< 32.4 U
02/23-25/2021	SW6010D	µg/L	< 32.4 U	< 32.4 U	39.8 J	216	< 32.4 U	33.3 J	< 32.4 U	< 32.4 U	1570	1360	453	267	1340	525	< 32.4 U
08/30-9/02/2021	SW6010D	µg/L	< 32.4 U	< 32.4 U	40.4 J	213	< 32.4 U	< 32.4 U	< 32.4 U	< 32.4 U	1500	1350	545	264	1320	557	< 32.4 U
02/07-02/10/2022	SW6010D	µg/L	< 32.4 U	< 32.4 U	38.7 J	199	< 32.4 U	< 32.4 U	< 32.4 U	< 32.4 U	1590	1410	400	285	1270	533	< 32.4 U
08/29-09/07/2022	SW6010D	µg/L	< 32.4 U	< 32.4 U	40.4 J	215	< 32.4 U	< 32.4 U	< 32.4 U	< 32.4 U	1620	1460	317	263	1260	550	< 32.4 U
02/13-02/15/2023	SW6010D	µg/L	< 12.4 U	< 12.4 U	39.2 J	208	18.7 J	21.8 J	< 12.4 U	< 12.4 U	1350	1320	266	254	1280	510	< 12.4 U
08/21-08/23/2023	SW6010D	µg/L	< 32.4 U	< 32.4 U	48.0 J	204	< 32.4 U	< 32.4 U	< 32.4 U	< 32.4 U	1450	1270	269	240	1300	569	< 32.4 U
02/12-14/2024	SW6010D	µg/L	< 4.0 U	< 4.0 U	< 40.9 U	195	< 19.0 U	< 21.4	< 4.0 U	< 5.7 U	1500	1180	231	269	1400	557	24.0 J
08/26-27/2024	SW6010D	µg/L	< 4.0 U	< 4.0 U	47.0 J	209	15.0 J	20.6 J	< 4.0 U	6.0 J	1410	1350	246	273	1380	615	< 4.0 U
Cadmium																	
10/27-11/01/2016	SW6020B	µg/L	< 0.60 U	1	0.98	< 0.60 U	--	--	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.06 U
12/06-07/2016	SW6020B	µg/L	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.6 U
01/18-19/2017	SW6020B	µg/L	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.06 U
02/28-03/02/2017	SW6020B	µg/L	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.06 U
04/10-12/2017	SW6020B	µg/L	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.06 U
05/11-12/2017	SW6020B	µg/L	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.06 U
06/19-20/2017	SW6020B	µg/L	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.060 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.060 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.06 U
07/24-25/2017	SW6020B	µg/L	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.60 U	< 0.06 U
01/29-30/2018	SW6010	µg/L	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	--	1.6	--	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U
01/07-18/2019	SW6010D	µg/L	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 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	< 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	< 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	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U
02/23-25/2021	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	0.71 J	0.74 J	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U
08/30-9/02/2021	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	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U
02/07-02/10/2022	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	< 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	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U	< 0.40 U
02/13-02/15/2023	SW6010D	µg/L	< 0.33 U	< 0.33 U	< 0.33 U	< 0.33 U	< 0.33 U	< 0.33 U	< 0.33 U	< 0.33 U	< 0.33 U	< 0.33 U	< 0.33 U	< 0.33 U	< 0.33 U	< 0.33 U	< 0.33 U
08/21-08/23/2023	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	< 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	< 0.29 U	< 0.29 U	< 0.29 U	< 0.29 U	< 0.29 U
08/26-27/2024	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	< 0.29 U	< 0.29 U	< 0.29 U	< 0.29 U	< 0.29 U
Calcium																	
10/27-11/01/2016	SW6020B	µg/L	22800	15500	41300	37700	--	--	39200	96800	116000	39300	199000	103000	37500	83400	< 103 U
12/06-07/2016	SW6020B	µg/L	20900	11100	56000	40700	29200	26800	14200	37600	98300	49900	84900	58600	36400	54700	< 1030 U
01/18-19/2017	SW6020B	µg/L	23700	19800	51400	48300	53700	30600	16300	56900	121000	60200	109000	80500	37400	56600	< 103 U
02/28-03/02/2017	SW6020B	µg/L	20700	19500	48000	44800	52300	30500	12600	51000	110000	48100	109000	66900	36800	53800	< 103 U
04/10-12/2017	SW6020B	µg/L	17800	20100	49300	46900	50700	33600	14900	50100	120000	45800	115000	77300	37000	55500	< 103 U
05/11-12/2017	SW6020B	µg/L	19100	20900	52300	46000	52000	82000	14200	54200	109000	46200	105000	69600	36700	54000	< 103 U
06/19-20/2017	SW6020B	µg/L	19400	23600	58900	38900	3940	35000	14200	53300	105000	48000	106000	84200	35600	58200	< 103 U
07/24-25/2017	SW6020B	µg/L	20500	20800	57800	46600	48000	46600	14600	47000	70600	41900	100000	72700	39800	61000	< 103 U
09/06/2017	SW6020B	µg/L	22600	21700	60800	50300	--	--	--	--	--	50000	--	78600	36000	64800	< 103 U
04/30-05/01/2018	SW6010	µg/L	19600	15800	47300	47400	--	--	--	--	--	63800	--	73700	36800	53200	< 50 U
10/15-16/2018	SW6010D	µg/L	19600	23800	52500	49600	--	--	--	--	--	68200	--	93700	36800	48100	< 50 U
01/07-18/2019	SW6010D	µg/L	19100	12700	45400	49900	41400	41300	16700	49100	98000	67800	95400	96500	36200	53900	< 50 U
01/07-18/2019	SW6020B	µg/L	19300	--	--	--	--	--	--	--	--	--	98800	--	--	--	--
09/09-13/2019	SW6010D	µg/L	19600	12800	48900	50500	41100	38600	13900	45600	100000	68400	94300	40400	36400	52100	< 24 U
03/02-05/2020	SW6010D	µg/L	19700	17400	47400	134000	40900	33300	11800	47500	105000	68900	66600	76200	33700	58700	< 24 U
08/24-28/2020	SW6010D	µg/L	20300	16000	44400	70300	45300	35900	12000	46000	101000	69100	66700	78000	35500	58000	< 94.2 U
02/23-25/2021	SW6010D	µg/L	19700	11600	40900	65100	40000	31700	11000	41400	97600	64000	60800	71200	34500	54400	< 94.2 U
08/30-9/02/2021	SW6010D	µg/L	19500	8900	43000	58300	37100	25900	12000	42000	105000	58400	66100	82800	33800	50200	< 94.2 U
02/07-02/10/2022	SW6010D	µg/L	20500	10500	42900	87000	41300	27600	11000	43700	118000	68200	64500	78400	35900	54500	< 94.2 U
08/29-09/07/2022	SW6010D	µg/L	19700	9440	41500	62600	40200	26900	10200	41500	106000	68600	64000	78600	35000	54900	< 94.2 U
02/13-02/15/2023	SW6010D	µg/L	21200	9890	47500	70100	38500	26500	9470	40700	113000	72000	55900	74900	36800	54200	<190 U
08/21-08/23/2023	SW6010D	µg/L	20400	7950	41800	67000	39400	25700	8860	40000	109000	63500	57800	68900	33700	54200	< 94.2 U
02/12-14/2024	SW6010D	µg/L	19900	7310	42200	62400	39800	27900	8520	44200	122000	67100	54900	75000	35300	56200	< 14.7 U
08/26-27/2024	SW6010D	µg/L	20300	7650	40600	70300	39400	25200	8110	40000	117000	65000	58200	78200	38200	54100	< 14.7 U
Chloride																	
10/27-11/01/2016	SW9056A	mg/L	8.3	7.8	32.9	7.5	--	--	5.0	8.7	13.2	18.9	14.5	11.8	16.1	11.0	< 0.10 U
12/06-07/2016	SW9056A	mg/L	7.3	11.8	40.1	21.9	10.1	7.6	3.1	8.0	12.2	16.2	13.0	21.1	14.0	9.9	< 0.10 U
01/18-19/2017	SW9056A	mg/L	8.5	24.3	44.4	30.2	17.0	8.5	3.8	10.3	13.8	14.8	14.4	23.4	14.9	11.1	< 0.10 U
02/28-03/02/2017	SW9056A	mg/L	8.1	30.0	44.3	39.3	18.1	7.3	3.2	9.2	13.6	12.8	13.9	22.9	13.9	10.6	< 0.10 U
04/10-12/2017	SW9056A	mg/L	8.0	31.8	27.1	47.9	16.4	6.0	3.3	10.1	13.8	12.4	13.6	19.9	13.8	10.5	< 0.10 U
05/11-12/2017	SW9056A	mg/L	8.2	38.9	58.3	32.1	16.7	5.8	3.2	9.7	13.8	12.1	13.8	23.1	13.8	10.4	< 0.50 U
06/19-20/2017	SW9056A	mg/L	8.8	44.0	60.3	28.7	16.4	6.2	3.3	10.8	14.6	13.0	14.4	24.3	14.2	10.9	< 0.50 U
07/24-25/2017	SW9056A	mg/L	8.2	42.4	59.8	27.0	13.0	5.5	2.7	9.9	13.2	11.9	13.4	21.5	13.1	9.9	< 0.50 U
09/06/2017	E300	mg/L	8.5	40.4	60.9	35.2	--	--	--	--	--	12.0	--	21.4	13.5	10.1	< 0.50 U
04/30-05/01/2018	E300	mg/L	9.4	29.3	45.2	32.9	--	--	--	--	--	13.3	--	19.6	13.6	9.9	< 0.50 U
10/15-16/2018	E300	mg/L	10.2	45.5	63.4	42.0	--	--	--	--	--	14.8	--	22.3	14.0	10.5	< 0.50 U
01/07-18/2019	E300	mg/L	9.7	29.8	58.8	4.0	9.7	6.3	4.0	9.5	13.3	14.4	13.4	21.3	13.9	10.3	< 0.60 U
09/09-13/2019	SW9056A	mg/L	8.0	18.8	54.3	46.4	9.7	7.2	3.7	7.8	13.2	14.3	13.2	25.3	13.6	10.3	< 0.60 U
03/02-05/2020	SW9056A	mg/L	8.2	28.6	50.2	47.5	9.5	7.9	3.3	9.2	12.9	14.2	11.0	26.1	13.0	10.2	< 0.60 U
08/24-28/2020	SW9056A	mg/L	8.8	27.7	39.5	33.0	8.9	7.4	3.2	8.8	12.4	13.6	10.2	22.6	12.9	10	< 0.60 U
02/23-25/2021	SW9056A	mg/L	9.9	20.1	36.3	23.1 J-	8.1	7.4	3.2	8.5	12.0	13.0 J-	9.6	14.5 J-	12.5 J-	9.8 J-	< 0.60 U
08/30-9/02/2021	SW9056A	mg/L	7.7	12.3	37.1	19.4	8.7	8.2	3.6	7.8	12.4	11.6	9.3	14.2	11.8	9.2	< 0.60 U
02/07-02/10/2022	SW9056A	mg/L	9.0	15.3	38.5	26.3	8.5	8.1	3.1	7.5	11.7	12.6	9.5	13.8	12.6	9.9	< 0.60 U
08/29-09/07/2022	SW9056A	mg/L	9.7	14.6	47.3	16.1	8.5	8.5	2.9	8.8	11.9	12.5	9.2	14.7	12.7	9.8	< 0.60 U
02/13-02/15/2023	SW9056A	mg/L	10.5	15.2	58.9	21.0	8.7	9.0	3.0	10.9	12.2	13.1	9.7	14.6	13.5	10.6	< 0.60 U
08/21-08/23/2023	SW9056A	mg/L	11.0	11.3	43.6	20.0	8.2	8.5	2.7	8.2	11.5 J	11.8	9.1 J	13.3	12.3	10.0	< 0.60 U
02/12-14/2024	SW9056A	mg/L	11.4	10.9	42.1	16.8	8.5	8.8	2.7	10.6	11.2	12.3	9.1	12.1	12.7	10.1	< 0.60 U
08/26-27/2024	SW9056A	mg/L	11.2	10.1	42.9	18.7	8.4	9.6	2.6	10.2	10.8	11.7	9.6	12.8	12.6	9.9	< 0.60 U
Chromium																	
10/27-11/01/2016	SW6020B	µg/L	< 1.00 U	1.7 J	< 1.00 U	< 1.00 U	--	--	< 1.00 U	2.3 J	< 1.00 U	6.2	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	0.15 J
12/06-07/2016	SW6020B	µg/L	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	1.6 J	< 1.00 U	< 1.00 U	< 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	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 0.1 U
02/28-03/02/2017	SW6020B	µg/L	< 1.00 U	1.2 J	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	1.1 J	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	0.15 J
04/10-12/2017	SW6020B	µg/L	< 1.00 U	1.9 J+	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	0.46 J
05/11-12/2017	SW6020B	µg/L	< 1.00 U	< 1.00 U	1.1 J+	4.1 J+	< 1.00 U	6.7 J+	2.1 J+	< 1.00 U	< 1.00 U	1.6 J	1.3 J+	1.1 J+	1.4 J+	1.8 J+	0.2 J
06/19-20/2017	SW6020B	µg/L	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 0.10	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	2.8 J+	< 1.00 U	13.9 J+	0.1 J
07/24-25/2017	SW6020B	µg/L	1.2 J+	1.3 J	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	1 J	1.5 J+	< 1.00 U	< 1.00 U	1.3 J	0.17 J
01/29-30/2018	SW6010	µg/L	< 2.50 U	< 2.50 U	< 2.50 U	< 2.50 U	< 2.50 U	--	< 2.50 U	--	< 2.50 U	< 2.50 U	< 2.50 U	< 2.50 U	< 2.50 U	< 2.50 U	< 2.50 U
01/07-18/2019	SW6010D	µg/L	< 2.50 U	< 2.50 U	< 2.50 U	< 2.50 U	< 2.50 U	< 2.50 U	< 2.50 U	< 2.50 U	< 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	1.8 J	< 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	1.2 J	< 1.0 U	2.1 J	< 1.0 U	1.1 J	< 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	< 3.7 U	< 3.7 U	< 3.7 U	< 3.7 U	< 3.7 U
02/23-25/2021	SW6010D	µg/L	< 3.7 U	< 3.7 U	< 3.7 U	4.5 J	< 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	< 3.7 U
08/30-9/02/2021	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	< 3.7 U	6.7	< 3.7 U	< 3.7 U	< 3.7 U
02/07-02/10/2022	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	< 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	< 3.7 U	< 3.7 U	< 3.7 U	< 3.7 U	< 3.7 U
02/13-02/15/2023	SW6010D	µg/L	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 U
08/21-08/23/2023	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	< 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	3.0 J	0.66 J	< 0.63 U	< 0.63 U	< 0.63 U	1.4 J	< 0.63 U	< 0.63 U	1.3 J	< 0.63 U
08/26-27/2024	SW6010D	µg/L	< 0.63 U	0.99 J	< 0.63 U	< 0.63 U	< 0.63 U	< 0.63 U	< 0.63 U	< 0.63 U	< 0.63 U	< 0.63 U	1.2 J	< 0.63 U	0.76 J	1.8 J	< 0.63 U
Cobalt																	
10/27-11/01/2016	SW6020B	µg/L	0.89 J	6.5	1.4	1.8	--	--	2.1	4.3	2.0	0.76 J	4.2	0.3 J	0.26 J	0.1 J	< 0.01 U
12/06-07/2016	SW6020B	µg/L	2.6	4.3	1.5	1.2	7.0	2.9	1.3	0.90 J	0.99 J	0.12 J	1.0	< 0.10 U	< 0.10 U	0.14 J	< 0.10 U
01/18-19/2017	SW6020B	µg/L	1.3	5.4	1.6	0.6 J	5.4	2.1	0.76 J	1.1	0.62 J	0.1 J	0.43 J	< 0.10 U	< 0.10 U	< 0.10 U	< 0.01 U
02/28-03/02/2017	SW6020B	µg/L	0.88 J	4.3	1.1	0.55 J	2.2	1.4	0.24 J	1.1	0.50 J	0.15 J	0.46 J	< 0.10 U	0.15 J	< 0.10 U	< 0.01 U
04/10-12/2017	SW6020B	µg/L	0.42 J	3.4	0.24 J	0.69 J	1.9	0.75 J	0.40 J	1.2	0.50 J	0.1 J	0.44 J	< 0.10 U	< 0.10 U	0.1 J	0.025 J

Appendix F
Historical Laboratory Detections
Bremo Power Station, North Pond
Permit No. 618

		Location	MW-11	MW-29S	MW-29D	MW-24	MW-25S	MW-25D	MW-26S	MW-26D	MW-27S	MW-27D	MW-28	MW-33	MW-34	MW-35	Field Blank
Sample Date	**Method**	**Unit**															
Cobalt (continued)																	
05/11-12/2017	SW6020B	µg/L	0.66 J	3.1	0.99 J	0.67 J	1.6	1.1	0.38 J	1.5	0.30 J	0.14 J	0.45 J	0.13 J	< 0.10 U	0.22 J	< 0.01 U
06/19-20/2017	SW6020B	µg/L	0.38 J	2.7	0.86 J	0.71 J	0.12	0.25 J	0.26 J	1.7	0.36 J	0.13 J	0.27 J	0.15 J	< 0.10 U	0.48 J	< 0.01 U
07/24-25/2017	SW6020B	µg/L	0.22 J	2	0.79 J	1	0.95 J	0.29 J	< 0.10 U	1.2	0.27 J	< 0.10	0.26 J	< 0.10 U	< 0.10 U	0.24 J	< 0.01 U
01/29-30/2018	SW6020	µg/L	0.62	1.2	0.55	1.3	0.92	--	< 0.15 U	--	0.27 J	0.4 J	0.62	< 0.15 U	< 0.15 U	0.25 J	< 0.15 U
04/30-05/01/2018	SW6010	µg/L	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	--	--	--	--	--	< 2.5 U	--	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U
10/15-16/2018	SW6020A	µg/L	0.42 J	0.82	0.76	1.1	--	--	--	--	--	0.13 J	--	0.25 J	< 0.085 U	0.22 J	< 0.085 U
01/07-18/2019	SW6020B	µg/L	0.74	0.89	0.35	1.6	0.60	0.45	0.062 J	1.3	0.36	0.37	0.44	0.065 J	< 0.050 U	0.27	< 0.050 U
09/09-13/2019	SW6020B	µg/L	0.34	0.28	0.34	1.1	0.64	0.68	0.055 J	2.0	0.28 J	0.52	0.65	29.1	0.11	0.32	< 0.050 U
03/02-05/2020	SW6020B	µg/L	1.2	0.78	0.37	12.1	1.3	0.82	< 0.050 U	1.7	0.20	1.4	0.11	0.13	< 0.050 U	0.42	< 0.050 U
08/24-28/2020	SW6020B	µg/L	0.60	0.28	0.26	61.9	0.96	0.74	0.058 J	1.8	0.28	0.37	0.26	0.18	< 0.050 U	0.65	< 0.050 U
09/30/2020	SW6020B	µg/L	--	--	--	57.8	--	--	--	--	--	--	--	--	--	--	--
02/23-25/2021	SW6020B	µg/L	0.50 J	0.39 J	0.36 J	45.3	1.0	0.68 J	0.12 J	1.9	0.14 J	< 5.0 U	0.59 J	0.36 J	< 5.0 U	0.42 J	< 0.050 U
08/30-9/02/2021	SW6020B	µg/L	0.39 J	0.12 J	0.42 J	45.5	0.79 J	1.0	< 0.050 U	1.5	0.15 J	0.36 J	0.58 J	0.78 J	0.070 J	0.42 J	< 0.050 U
02/07-02/10/2022	SW6020B	µg/L	1.4	0.23 J	0.45 J	356 J	1.7	0.91 J	0.050 J	1.3	0.17 J	0.25 J	0.51 J	0.13 J	< 0.050 U	0.66 J	< 0.050 U
04/13/2022	SW6020B	µg/L	--	--	--	48.9	--	--	--	--	--	--	--	--	--	--	--
08/29-09/07/2022	SW6020B	µg/L	0.26 J	0.16 J	0.50 J	58.9	0.97 J	0.74 J	< 0.050 U	1.2	0.11 J	0.34 J	0.16 J	0.066 J	< 0.050 U	0.40 J	< 0.050 U
02/13-02/15/2023	SW6020B	µg/L	1.1	0.40 J	0.65 J	49.8	0.73 J	0.69 J	0.14 J	0.94 J	0.20 J	0.21 J	0.21 J	0.087 J	< 0.050 U	0.70 J	< 0.050 U
08/21-08/23/2023	SW6020B	µg/L	0.24 J	0.11 J	0.18 J	65.6 J	2.5	0.62 J	< 0.050 U	1.1	0.17 J	0.67 J	0.11 J	0.34 J	0.086 J	0.98 J	< 0.050 U
02/12-14/2024	SW6020B	µg/L	0.34 J	0.070 J	0.43 J	60.4	4.0	1.1	< 0.050 U	1.1	0.18 J	0.45 J	0.14 J	0.074 J	< 0.050 U	0.45 J	< 0.050 U
08/26-27/2024	SW6020B	µg/L	0.39 J	< 0.14 U	0.21 J	47.3	1.9	0.78 J	< 0.14 U	0.58 J	0.15 J	< 0.14 U	< 0.14 U	< 0.14 U	< 0.14 U	0.44 J	< 0.14 U
Copper																	
10/27-11/01/2016	SW6020B	µg/L	< 1.20 U	6.9	11.2	< 1.20 U	--	--	< 1.20 U	< 1.20 U	< 1.20 U	9.6	< 1.20 U	1.5 JB	1.9 B	< 1.20 U	1.1
12/06-07/2016	SW6020B	µg/L	5.5	< 1.20 U	1.4 J	< 1.20 U	< 1.20 U	3.0 J	< 1.20 U	< 1.20 U	< 1.20 U	3 J	< 1.20 U	< 1.20 U	< 1.20 U	< 1.20 U	< 1.20 U
01/18-19/2017	SW6020B	µg/L	2.4 J	< 1.20 U	< 1.20 U	3 J	< 1.20 U	< 1.20 U	< 1.20 U	< 1.20 U	< 1.20 U	3.5 J	< 1.20 U	< 1.20 U	< 1.20 U	< 1.20 U	0.15 J
02/28-03/02/2017	SW6020B	µg/L	3.2 J	3.2 J	2.7 J	3.3 J	< 1.20 U	< 1.20 U	< 1.20 U	< 1.20 U	< 1.20 U	< 1.20 U	< 1.20 U	< 1.20 U	< 1.20 U	1.8 J	< 0.12 U
04/10-12/2017	SW6020B	µg/L	< 1.20 U	< 1.20 U	< 1.20 U	< 1.20 U	< 1.20 U	< 1.20 U	< 1.20 U	1.2 J+	1.2 J+	3.3 J	< 1.20 U	2.4 J+	< 1.20 U	< 1.20 U	0.88
05/11-12/2017	SW6020B	µg/L	2.3 J	1.5 J	2.3 J	2.8 J+	3.3 J+	8.9 J+	1.9 J+	3.1 J+	1.3 J+	5 J	1.5 J+	3.6 J+	3.2 J+	2.9 J+	0.28 J
06/19-20/2017	SW6020B	µg/L	< 1.20 U	< 1.20 U	< 1.20 U	< 1.20 U	< 0.12 U	< 1.20 U	< 1.20 U	< 1.20 U	< 1.20 U	< 1.20 U	< 1.20 U	2.3 J	< 1.20 U	1.6 J	< 0.12 U
07/24-25/2017	SW6020B	µg/L	< 1.20 U	< 1.20 U	< 1.20 U	< 1.20 U	< 1.20 U	< 1.20 U	< 1.20 U	< 1.20 U	< 1.20 U	< 1.20 U	< 1.20 U	< 1.20 U	< 1.20 U	< 1.20 U	< 0.12 U
09/09-13/2019	SW6010D	µg/L	< 2.1 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.1 U	2.6 J	< 2.1 U	< 2.1 U	2.5 J	8.0	< 2.1 U	3.3 J	< 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	3.4 J	2.2 J	3.1 J	< 2.1 U	< 2.1 U	< 2.1 U	7.5	< 2.1 U	2.5 J	< 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	< 4.3 U	4.5 J	< 4.3 U	< 4.3 U	< 4.3 U
02/23-25/2021	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	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U
08/30-9/02/2021	SW6010D	µg/L	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	24.2	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	4.7 J	< 4.3 U	< 4.3 U	< 4.3 U
02/07-02/10/2022	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	< 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	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U
02/13-02/15/2023	SW6010D	µg/L	< 2.6 U	< 3.5 U	< 2.6 U	< 2.6 U	< 2.6 U	< 3.2 U	< 2.6 U	< 2.6 U	< 3.9 U	< 2.6 U	< 4.9 U	< 2.6 U	< 2.6 U	< 2.6 U	2.8 J
08/21-08/23/2023	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	< 4.3 U	5.1	< 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	10.1	1.7 J	3.7 J	< 0.62 U	1.0 J	1.4 J	< 1.2 U	< 0.75 U	< 3.0 U	< 0.62 U	< 0.62 U	< 0.62 U
08/26-27/2024	SW6010D	µg/L	0.76 J	< 0.62 U	0.81 J	0.65 J	1.2 J	1.7 J	< 0.62 U	< 0.62 U	0.83 J	< 0.62 U	< 0.62 U	1.4 J	< 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	0.090 J	--	--	0.020 J	0.058 J	0.030 J	0.15	0.022 J	0.077 J	0.055 J	0.050 J	< 0.020 U
12/06-07/2016	SW9056A	mg/L	< 0.020 U	0.034 J	0.075 J	0.10	0.060 J	0.054 J	< 0.020 U	0.065 J	0.042 J	0.20	0.021 J	0.078 J	0.055 J	0.030 J	< 0.020 U
01/18-19/2017	SW9056A	mg/L	< 0.020 U	0.041 J	0.090 J	0.091 J	0.074 J	0.041 J	< 0.020 U	0.077 J	0.057 J	0.17	0.034 J	0.095 J	0.070 J	0.035 J	< 0.020 U
02/28-03/02/2017	SW9056A	mg/L	< 0.020 U	0.040 J	0.034 J	0.040 J	0.063 J	0.035 J	< 0.020 U	0.058 J	0.031 J	0.10	< 0.020 U	0.063 J	0.049 J	0.041 J	< 0.020 U
04/10-12/2017	SW9056A	mg/L	< 0.020 U	0.025 J	0.10	0.099 J	0.067 J	0.050 J	< 0.020 U	0.080 J	0.039 J	0.16	0.051 J	0.076 J	0.079 J	0.061 J	< 0.020 U
05/11-12/2017	SW9056A	mg/L	< 0.050 U	< 0.050 U	0.10	0.053 J	0.094 J	0.071 J	< 0.050 U	0.084 J	0.063 J	0.19	< 0.050 U	0.083 J	0.077 J	0.057 J	< 0.050 U
06/19-20/2017	SW9056A	mg/L	< 0.050 U	< 0.050 U	0.10	0.053 J	0.087 J	0.062 J	< 0.050 U	0.067 J	< 0.050 U	0.18	< 0.050 U	0.068 J	0.064 J	< 0.050 U	< 0.050 U
07/24-25/2017	SW9056A	mg/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	0.10	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
09/06/2017	E300	mg/L	< 0.050 U	< 0.050 U	0.065 J	0.070 J	--	--	--	--	--	0.12	--	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
01/29-30/2018	E300	mg/L	< 0.050 U	< 0.050 U	0.11	< 0.050 U	0.090 J	--	< 0.050 U	--	< 0.050 U	0.15	< 0.050 U	0.062 J	0.055 J	< 0.050 U	< 0.050 U
04/30-05/01/2018	E300	mg/L	< 0.050 U	< 0.050 U	0.15	0.069 J	--	--	--	--	--	0.15	--	0.061 J	0.053 J	< 0.050 U	< 0.050 U
10/15-16/2018	E300	mg/L	< 0.050 U	< 0.050 U	0.11	0.079 J	--	--	--	--	--	0.15	--	0.065 J	0.054 J	< 0.050 U	< 0.050 U
01/07-18/2019	E300	mg/L	< 0.050 U	0.40	0.15	< 0.050 U	0.079 J	0.050 J	< 0.050 U	< 0.050 U	0.056 J	0.16	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
09/09-13/2019	SW9056A	mg/L	< 0.050 U	< 0.050 U	0.12	0.098 J	0.086 J	< 0.050 U	< 0.050 U	0.084 J	0.065 J	0.22	< 0.050 U	0.77	0.083 J	0.051 J	< 0.050 U
10/10/2019	SW9056A	mg/L	--	--	--	--	--	--	--	--	--	--	--	0.10	--	--	--
03/02-05/2020	SW9056A	mg/L	< 0.050 U	< 0.050 U	0.10	< 0.050 U	0.078 J	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	0.11	< 0.050 U	0.072 J	< 0.050 U	< 0.050 U	< 0.050 U
08/24-28/2020	SW9056A	mg/L	< 0.050 U	< 0.050 U	0.12	< 0.050 U	0.095 J	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	0.15	< 0.050 U	0.085 J	0.12	< 0.050 U	< 0.050 U
02/23-25/2021	SW9056A	mg/L	< 0.050 U	< 0.050 U	0.16	< 0.050 UJ	0.088 J	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	0.14 J-	< 0.050 U	0.074 J	0.058 J	< 0.050 UJ	< 0.050 U
08/30-9/02/2021	SW9056A	mg/L	< 0.050 U	< 0.050 U	0.094 J	0.050 J	0.074 J	< 0.050 U	< 0.050 U	< 0.050 U	0.056 J	0.12	< 0.050 U	0.068 J	< 0.050 U	< 0.050 U	< 0.050 U
02/07-02/10/2022	SW9056A	mg/L	< 0.050 U	< 0.050 U	0.11	0.061 J	0.095 J	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	0.13	< 0.050 U	0.062 J	0.061 J	< 0.050 U	< 0.050 U
08/29-09/07/2022	SW9056A	mg/L	0.052 J	0.050 J	0.12	0.10	0.17	0.078 J	0.073 J	0.091 J	0.12	0.19	0.067 J	0.13	0.12	0.084 J	< 0.050 U
02/13-02/15/2023	SW9056A	mg/L	< 0.10 U	0.051 J	0.11	0.084 J	0.15	0.059 J	< 0.050 U	0.090 J	0.086 J	0.15	0.053 J	0.11	0.089 J	0.074 J	< 0.050 U
08/21-08/23/2023	SW9056A	mg/L	< 0.050 U	0.053 J	0.13	< 0.050 U	0.13	0.052 J	< 0.050 U	0.061	0.084 J	0.10	0.053 J	0.096 J	< 0.050 U	< 0.050 U	< 0.050 U
02/12-14/2024	SW9056A	mg/L	< 0.050 U	< 0.050 U	0.12	0.061 J	0.19	< 0.050 U	< 0.050 U	< 0.050 U	0.054 J	0.13	< 0.050 U	0.079 J	0.052 J	0.057 J	< 0.050 U
08/26-27/2024	SW9056A	mg/L	< 0.050 U	< 0.050 U	0.13	< 0.050 U	0.072 J	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	0.10	< 0.050 U	0.065 J	< 0.050 U	< 0.050 U	< 0.050 U
Hardness																	
09/09-13/2019	SW6010D	µg/L	101000	42500	168000	163000	144000	126000	44800	153000	434000	280000	385000	159000	146000	167000	< 131 U
03/02-05/2020	SM2340B	µg/L	104000	57900	164000	404000	145000	109000	38400	160000	454000	282000	270000	251000	137000	185000	< 131 U
08/24-28/2020	SM2340B	µg/L	106000	53300	156000	222000	158000	117000	38600	154000	448000	286000	270000	257000	144000	184000	< 131 U
02/23-25/2021	SM2340B	µg/L	104000	39100	143000	208000	146000	106000	36700	144000	446000	273000	254000	239000	144000	176000	< 131 U
08/30-9/02/2021	SM2340B	µg/L	104000	29800	152000	190000	134000	85100	39400	144000	466000	257000	273000	265000	141000	165000	< 131 U
02/07-02/10/2022	SM2340B	µg/L	107000	35100	149000	268000	146000	89600	35800	146000	515000	287000	257000	257000	144000	174000	154 J
08/29-09/07/2022	SM2340B	µg/L	104000	31700	144000	200000	143000	88300	33400	140000	479000	292000	259000	261000	144000	179000	< 131 U
02/13-02/15/2023	SM2340B	µg/L	107000	34200	161000	220000	136000	83200	30600	136000	487000	304000	224000	247000	148000	173000	< 506 U
08/21-08/23/2023	SM2340B	µg/L	104000	26400	148000	212000	140000	83200	28500	134000	465000	277000	233000	229000	137000	175000	< 131 U
02/12-14/2024	SM2340B	µg/L	103000	24200	147000	200000	142000	90100	27700	147000	536000	292000	224000	250000	143000	181000	< 36.8 U
08/26-27/2024	SM2340B	µg/L	103000	25300	143000	220000	138000	79200	26000	133000	505000	286000	230000	256000	150000	177000	< 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	< 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 U	10	< 5 U	< 5 U	< 5 U	< 5 U	14	< 5 U	< 5 U
03/02-05/2020	SW7196A	µg/L	< 5 U	< 5 U	< 5 U	29	< 5 U	< 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	8	< 5 U	< 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	7	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
12/01-03/2020	SW7196A	µg/L	< 5 U	< 5 U	< 5 U	7	< 5 U	< 5 U	< 5 U	5	< 5 U	5	8	< 5 U	< 5 U	< 5 U	< 5 U
02/23-25/2021	SW7196A	µg/L	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
06/07-09/2021	SW7196A	µg/L	< 5 U	< 5 U	< 5 U	5	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
08/30-9/02/2021	SW7196A	µg/L	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	6	6	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
02/07-02/10/2022	SW7196A	µg/L	< 5 U	< 5 U	< 5 U	5	< 5 U	< 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	8	9	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	10	< 5 U	< 5 U	< 5 U
02/13-02/15/2023	SW7196A	µg/L	< 5 U	< 5 U	< 5 U	6	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
08/21-08/23/2023	SW7196A	µg/L	< 5 U	< 5 U	< 5 U	< 1 UJ	< 1 UJ	< 1 UJ	< 1 UJ	< 1 UJ	< 1 UJ	< 1 UJ	< 1 UJ	< 1 UJ	< 1 R	< 1 UJ	< 5 U
02/12-14/2024	SW7196A	µg/L	0.085	0.50	<0.025 U	<0.025 U	0.032	<0.025 U	0.22 J	<0.025 U	<0.025 UJ	0.025	0.73	0.060	0.31 J	<0.025 U	<0.025 U
08/26-27/2024	SW7196A	µg/L	1.1 J	1.0 J	0.38 J	< 0.0043 UJ	< 0.083 U	< 0.0080 U	0.27 J+	0.14 J+	0.93 J	0.23 J	0.25 J	< 0.087 U	0.48 J	< 0.0043 UJ	0.025
Iron																	
09/09-13/2019	SW6020B	µg/L	204	62.9	748	3750	863	811	136	3640	199	630	607	747	415	3450	< 7.5 U
03/02-05/2020	SW6020B	µg/L	1180	234	737	102000	699	826	89.4	4290	114	1670	81.0	201	26.0 J	3260	< 7.5 U
08/24-28/2020	SW6020B	µg/L	593	268	926	17300	958	1440	132	4010	77.9	557	329	247	< 20.9 U	4060	< 20.9 U
02/23-25/2021	SW6020B	µg/L	502	764	702	10700 J	463	1100	271	3110	32.3 J	159 J	235	89.8	< 250	2370	< 20.9 U
08/30-9/02/2021	SW6020B	µg/L	193	< 67.1 U	796	6450	532	985	32.4 J	2830	27.2 J	317	101	504	151 J	2880	< 20.9 U
02/07-02/10/2022	SW6020B	µg/L	1280	207	862	19900 J	1290	1270	102	2720	107	246	522	88.2	< 20.9 U	1390	< 20.9 U
08/29-09/07/2022	SW6020B	µg/L	130	306	545	5970	501	1310	24.3 J	3060	47.3 J	389	130	95.3	65.2	2310	< 20.9 U
02/13-02/15/2023	SW6020B	µg/L	1010	847	481	9290	530	1260	324	3260	118	345	509	92.1	115 J	1890	< 20.9 U
08/21-08/23/2023	SW6020B	µg/L	232	136	355	8760 J	1180	1170	32.8 J	2400	84.3	495	212	311	280	1300	< 20.9 U
02/12-14/2024	SW6020B	µg/L	313	84.1	418	5980	1120	1210	48.3 J	2720	124	462	368	85.7	< 20.9 U	1710	< 20.9 U
08/26-27/2024	SW6020B	µg/L	393	201	471	6090	331	736	< 18.4 U	2280	27.9	261	218	51.8	15.5 J	2240	< 3.0 U
Lead																	
10/27-11/01/2016	SW6020B	µg/L	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	--	--	< 0.80 U	< 0.80 U	< 0.80 U	1.5	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.08 U
12/06-07/2016	SW6020B	µg/L	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 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	< 0.80 U	< 0.80 U	1.1	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.08 U
02/28-03/02/2017	SW6020B	µg/L	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.08 U
04/10-12/2017	SW6020B	µg/L	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.08 U
05/11-12/2017	SW6020B	µg/L	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.08 U
06/19-20/2017	SW6020B	µg/L	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.080 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.08 U

Appendix F
Historical Laboratory Detections
Bremo Power Station, North Pond
Permit No. 618

		Location	MW-11	MW-29S	MW-29D	MW-24	MW-25S	MW-25D	MW-26S	MW-26D	MW-27S	MW-27D	MW-28	MW-33	MW-34	MW-35	Field Blank
Sample Date	**Method**	**Unit**															
Lead (continued)																	
07/24-25/2017	SW6020B	µg/L	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.08 U
01/29-30/2018	SW6020	µg/L	0.032 J+	0.045 J+	0.38 J+	0.046 J+	0.093 J+	--	< 0.028 U	--	0.057 J+	< 0.028 U	0.080 J+	0.11 J+	< 0.028 U	< 0.028 U	< 0.028 U
04/30-05/01/2018	SW6010	µg/L	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	--	--	--	--	--	< 2.5 U	--	< 2.5 U	< 2.5 U	< 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
01/07-18/2019	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	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U
01/07-18/2019	SW6020B	µg/L	< 0.050 U	--	--	--	--	--	--	--	--	--	< 0.050 U	--	--	--	--
09/09-13/2019	SW6020B	µg/L	< 0.050 U	< 0.050 U	0.11 J	< 0.050 U	0.087 J	1.2	< 0.050 U	< 0.050 U	2.6	< 0.25 U	< 0.15 U	0.15	0.091 J	0.055 J	< 0.050 U
03/02-05/2020	SW6020B	µg/L	0.050 J	0.077 J	0.30	0.090 J	0.11	0.31	< 0.050 U	0.38	0.10	0.71	< 0.050 U	0.063 J	< 0.050 U	< 0.050 U	< 0.050 U
08/24-28/2020	SW6020B	µg/L	< 0.077 U	< 0.077 U	0.19	< 0.077 U	0.091 J	< 0.077 U	< 0.077 U	< 0.077 U	< 0.077 U	0.11	< 0.077 U	0.15	< 0.077 U	< 0.077 U	< 0.077 U
02/23-25/2021	SW6020B	µg/L	< 0.077 U	< 0.077 U	< 0.077 U	0.093 J	< 0.077 U	0.23 J	0.11 J	< 0.077 U	< 0.077 U	< 0.077 U	0.15 J	0.14 J	< 0.38 U	< 0.077 U	< 0.077 U
08/30-9/02/2021	SW6020B	µg/L	< 0.077 U	< 0.077 U	0.089 J	< 0.077 U	0.14 J	< 0.077 U	< 0.077 U	< 0.077 U	< 0.077 U	0.095 J	0.083 J	0.39 J	< 0.077 U	< 0.077 U	< 0.077 U
02/07-02/10/2022	SW6020B	µg/L	0.13 J	< 0.077 U	0.11 J	< 0.077 U	0.26 J	< 0.077 U	< 0.077 U	0.11 J	0.27 J	0.11 J	0.32 J	0.077 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	< 0.077 U	< 0.077 U	0.18 J	< 0.077 U	< 0.077 U	0.090 J	< 0.077 U	< 0.077 U	< 0.077 U
02/13-02/15/2023	SW6020B	µg/L	< 0.092 U	< 0.12 U	< 0.077 U	< 0.085 U	< 0.14 U	< 0.077 U	< 0.13 U	< 0.077 U	< 0.077 U	< 0.077 U	< 0.21 U	< 0.077 U	< 0.077 U	< 0.077 U	< 0.077 U
08/21-08/23/2023	SW6020B	µg/L	< 0.077 U	< 0.077 U	< 0.077 U	0.14 J	0.20 J	0.088 J	< 0.077 U	< 0.077 U	< 0.077 U	0.15 J	< 0.077 U	0.41 J	< 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	0.13 J	0.18 J	1.3	< 0.077 U	< 0.077 U	< 0.077 U	< 0.077 U	0.20 J	0.11 J	< 0.077 U	< 0.077 U	< 0.077 U
08/26-27/2024	SW6020B	µg/L	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U	0.52 J	< 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	2.6 J	--	--	5.1 J	19.4 J	7.0 J	8.6 J	5.7 J	7.1 J	7.9 J	57.1	0.19 J
12/06-07/2016	SW6020B	µg/L	3.5 B	< 0.70 U	7.6 B	4.8 B	< 0.70 U	1.6 B	2.0 B	4.0 B	5.1 B	88	0.98 B	4.8 B	9.9 J	21.8 J	1.6 J
01/18-19/2017	SW6020B	µg/L	< 0.70 U	< 0.70 U	5.2 J	3.7 J	< 0.70 U	2.5 J	0.80 J	4.5 J	7.3 J	94	0.97 J	3 J	6.7 J	18.7 J	< 0.07 U
02/28-03/02/2017	SW6020B	µg/L	< 0.70 U	0.86 B	2.9 J	2.5 J	1.5 J	3.6 J	1.9 J	5.8 J	6.4 J	85.9	1.9 J	3.4 J	7.7 J	22.1 J	0.18 J
04/10-12/2017	SW6020B	µg/L	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	6.6 J	< 0.70 U	3.5 J	< 0.70 U	76.2	< 0.70 U	< 0.70 U	8.1 J+	18.9 J	< 0.07 U
05/11-12/2017	SW6020B	µg/L	3.9 J+	2.3 J	4.2 J	3 J+	1.9 J+	5.5 J	2.4 J	7.3 J	8.6 J+	95.7 J+	3.8 J	3.8 J	8.1 J+	24.9 J	0.13 J
06/19-20/2017	SW6020B	µg/L	< 0.70 U	1.2 J	3.7 J	1.1 J	< 0.070 U	3.8 J	1.8 J	5.7 J	5.3 J	83.3	1.8 J	2.1 J	6.4 J	23.9 J	0.16 J
07/24-25/2017	SW6020B	µg/L	0.79 J	1.3 J	3 J	< 0.70 U	< 0.70 U	3.2 J	< 0.70 U	4.4 J	3.9 J	66.2	2.2 J	1.9 J	6.9 J	20.2 J	< 0.07 U
01/29-30/2018	SW6020	µg/L	0.43 J	0.75	2.7	1.9	0.76	--	1.1	--	5.7	68	1.7	4.3	7.7	35.7	< 0.17 U
04/30-05/01/2018	SW6020A	µg/L	0.48 J	0.80	2.0	1.9	--	--	--	--	--	57.6	--	3.5	6.7	33.1	0.18 J
10/15-16/2018	SW6020B	µg/L	0.43 J	0.77 J	2.1 J	1.6 J	--	--	--	--	--	51.0	--	1.6 J	7.1	54.8	0.096 J
01/07-18/2019	SW6020B	µg/L	< 0.42 U	0.62 J	2.0 J	2.0 J	0.75 J	4.1	1.2 J	4.0	4.7	46.1	1.0 J	0.80 J	6.6	31.2	< 0.42 U
09/09-13/2019	SW6020B	µg/L	< 0.42 U	0.50 J	2.2 J	1.5 J	0.56 J	3.7	0.99 J	4.7	5.4 J	50.3	1.3 J	1.8 J	7.1	27.2	< 0.42 U
03/02-05/2020	SW6020B	µg/L	< 0.42 U	< 0.42 U	1.4 J	2.1 J	< 0.42 U	3.0	< 0.42 U	3.9	3.5	46.4	0.88 J	5.5	7.5	22.2	0.57 J+
08/24-28/2020	SW6020B	µg/L	< 0.39 U	0.56 J	1.6 J	2.8	0.74 J	3.1	0.82 J	4.6	4.1	45.1	44.9	4.7	5.9	13.4	< 0.39 U
02/23-25/2021	SW6020B	µg/L	< 0.50 U	0.78 J	1.7 J	2.7	0.65 J	3.5	0.80 J	4.8	4.8	46.8	1.2 J	3.8	7.0 J	16.0	< 0.50 U
08/30-9/02/2021	SW6020B	µg/L	< 0.50 U	0.54 J	1.6 J	3.0	0.98 J	3.1	1.1 J	5.5	4.9	45.9	1.5 J	3.8	7.1	11.5	< 0.50 U
02/07-02/10/2022	SW6020B	µg/L	< 0.50 U	0.54 J	1.5 J	1.5 J	0.71 J	2.9	0.84 J	4.5	4.9	27.6	1.5 J	3.4	6.3	13.2	< 0.50 U
08/29-09/07/2022	SW6020B	µg/L	< 0.50 U	0.63 J	1.5 J	2.2 J	0.78 J	2.9	0.92 J	5.4	5.0	26.1	1.5 J	3.9	6.5	14.1	< 0.50 U
02/13-02/15/2023	SW6020B	µg/L	< 0.50 U	0.57 J	1.2 J	2.7	0.74 J	2.8	0.96 J	4.8	5.5	26.9	1.4 J	3.4	6.7	27.0	< 0.50 U
08/21-08/23/2023	SW6020B	µg/L	< 0.50 U	< 0.50 U	1.1 J	3.1	0.73 J	2.6	0.78 J	4.9	4.4	29.7	1.3 J	3.5	7.4	39.7	< 0.50 U
02/12-14/2024	SW6020B	µg/L	< 0.50 U	< 0.50 U	1.3 J	2.7	0.92 J	3.0	0.88 J	5.0	5.9	26.5	1.4 J	3.5	7.1	19.8	< 0.50 U
08/26-27/2024	SW6020B	µg/L	0.44 J	0.53 J	1.2 J	2.7	0.90 J	2.9	0.83 J	5.4	4.6	30.0	1.5 J	3.8	7.2	18.3	< 0.33 U
Manganese																	
09/09-13/2019	SW6020B	µg/L	3.5	151	1740	2530	815	223	30.6	3430	50.8	1030	26.0	1640	23.6	1720	< 0.14 U
03/02-05/2020	SW6020B	µg/L	12.8	209	1310	9470	338	194	18.3	2130	52.8	964	7.2	39.9	5.1	1580	< 0.14 U
08/24-28/2020	SW6020B	µg/L	6.5	99.2	1300	3530	264	224	25.8	2140	52.1	244	7.9	56.2	5.0	1730	< 0.47 U
02/23-25/2021	SW6020B	µg/L	6.2	39.8	1320	3710 J+	138	199	58.2	1970	42.9	141 J+	54.2	20.0 J+	< 5.1	1200 J+	< 1.0 U
08/30-9/02/2021	SW6020B	µg/L	4.5	15.0	1210	3520	123	161	10.5	2060	35.7	168	48.5	123	15.1 J	583	< 1.0 U
02/07-02/10/2022	SW6020B	µg/L	13.2	26.0	1060	3310	269	182	21.9	1660	38.7	116	38.1	23.6	5.5	922	< 1.0 U
08/29-09/07/2022	SW6020B	µg/L	2.3	12.3	870	3070	118	178	10.1	1560	34.0	177	18.4	23.3	7.5	859	< 1.0 U
02/13-02/15/2023	SW6020B	µg/L	11.8	24.7	942	3450	80.3	178	49.4	1450	20.0	106	15.6	22.0	13.1 J	994	< 1.0 U
08/21-08/23/2023	SW6020B	µg/L	2.2	7.7	846	3320	277	172	5.3	1520	36.0	238	13.4	51.0	19.6	740	< 1.0 U
02/12-14/2024	SW6020B	µg/L	3.0	4.9	913	3130	332	159	5.0	1180	21.6	212	14.0	17.6	4.3	726	< 1.0 U
08/26-27/2024	SW6020B	µg/L	3.7	4.6	918	3210	83.5	125	3.1	1030	31.5	62.5	12.7	12.0	4.5	652	< 0.24 U
Mercury																	
10/27-11/01/2016	SW7470	µg/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	--	--	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	0.5	< 0.10 U	< 0.10 U
12/06-07/2016	SW7470	µg/L	< 0.10 U	0.1 J	0.14 J	0.11 J	< 0.10 U	0.12 J	< 0.10 U	0.11 J	< 0.10 U	< 0.10 U	0.13 J	< 0.10 U	0.53	0.1 J	< 0.10 U
01/18-19/2017	SW7470	µg/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	0.52	< 0.10 U	< 0.10 U
02/28-03/02/2017	SW7470	µg/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	0.45	< 0.10 U	< 0.10 U
04/10-12/2017	SW7470	µg/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
05/11-12/2017	SW7470	µg/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	0.34	< 0.10 U	< 0.10 U
06/19-20/2017	SW7470	µg/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	0.38	< 0.10 U	< 0.10 U
07/24-25/2017	SW7470	µg/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	0.23	< 0.10 U	< 0.10 U
01/29-30/2018	SW7470	µg/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	--	< 0.10 U	--	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	0.27	< 0.10 U	< 0.10 U
04/30-05/01/2018	SW7470	µg/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	--	--	--	--	--	< 0.10 U	--	< 0.10 U	0.38	< 0.10 U	< 0.10 U
10/15-16/2018	SW7470A	µg/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	--	--	--	--	--	< 0.10 U	--	< 0.10 U	0.46	< 0.10 U	< 0.10 U
01/07-18/2019	SW7470A	µg/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	0.49	< 0.10 U	0.10 J
09/09-13/2019	SW7470A	µg/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	0.53	< 0.10 U	< 0.10 U
03/02-05/2020	SW7470A	µg/L	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	0.33	< 0.10 U	< 0.10 U
08/24-28/2020	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	< 0.12 U	< 0.12 U	0.32	< 0.12 U	< 0.12 U
02/23-25/2021	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	< 0.12 U	< 0.12 U	0.31	< 0.12 U	< 0.12 U
08/30-9/02/2021	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	< 0.12 U	< 0.12 U	0.33	< 0.12 U	< 0.12 U
02/07-02/10/2022	SW7470A	µg/L	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	0.33	< 0.12 U	< 0.12 U	< 0.12 U	< 0.12 U	0.46	0.21	< 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	< 0.12 U	< 0.12 U	0.15 J	< 0.12 U	< 0.12 U
02/13-02/15/2023	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	< 0.12 U	< 0.12 U	0.17 J	< 0.12 U	< 0.12 U
08/21-08/23/2023	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	< 0.12 U	< 0.12 U	0.14 J	< 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	< 0.12 U	< 0.12 U	0.15 J	< 0.12 U	< 0.12 U
08/26-27/2024	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	< 0.12 U	< 0.12 U	0.17 J	< 0.12 U	< 0.12 U
Molybdenum																	
10/27-11/01/2016	SW6020B	µg/L	< 1.10 U	7.6	46.1	14.1	--	--	1.3 J	43.1	1.6 J	161	< 1.10 U	22	1.9 J	47.2	< 0.11 U
12/06-07/2016	SW6020B	µg/L	< 1.10 U	2 J	15.7	22.8	3.9 J	18.9	< 1.10 U	15.2	1.2 J	84	< 1.10 U	13.1	4.2 J	10	< 1.10 U
01/18-19/2017	SW6020B	µg/L	< 1.10 U	1.7 J	16.4	40.9	5.7	8.3	< 1.10 U	16.7	1.3 J	72.9	< 1.10 U	14.9	2.1 J	6.8	< 0.11 U
02/28-03/02/2017	SW6020B	µg/L	< 1.10 U	1.3 J	12.8	34.1	4.9 J	8.8	< 1.10 U	12.0	1.2 J	50.6	< 1.10 U	10.5	1.9 J	4.8 J	< 0.11 U
04/10-12/2017	SW6020B	µg/L	< 1.10 U	1.4 J	3.5 J	22	5.1	7.8	< 1.10 U	9.8	1.4 J	39.2	< 1.10 U	9.8	1.2 J	4.6 J	< 0.11 U
05/11-12/2017	SW6020B	µg/L	< 1.10 U	< 1.10 U	5.5	29.9	5.0 J	12.7	< 1.10 U	9.5	1.2 J	38.4	< 1.10 U	7.9	< 1.10 U	4.2 J	< 0.11 U
06/19-20/2017	SW6020B	µg/L	< 1.10 U	< 1.10 U	3.8 J	23.1	0.34 J	4.2 J	< 1.10 U	8.9	1.1 J	29.7	< 1.10 U	8.5	< 1.10 U	4 J	< 0.11 U
07/24-25/2017	SW6020B	µg/L	< 1.10 U	< 1.10 U	3.3 J	26.4	5.0 J	5.4	< 1.10 U	7.8	< 1.10 U	25.7	< 1.10 U	7.1	< 1.10 U	3.7 J	< 0.11 U
01/29-30/2018	SW6010	µg/L	< 2.50 U	< 2.50 U	< 2.50 U	27.9	3.7 J	--	< 2.50 U	--	< 2.50 U	28.7	< 2.50 U	5.2	< 2.50 U	2.7 J	< 2.50 U
04/30-05/01/2018	SW6010	µg/L	< 2.50 U	< 2.50 U	< 2.50 U	24.0	--	--	--	--	--	16.1	--	4.0 J	< 2.50 U	3.4 J	< 2.50 U
10/15-16/2018	SW6010D	µg/L	< 2.50 U	< 2.50 U	< 2.50 U	25.6	--	--	--	--	--	8.2	--	4.6 J	< 2.50 U	< 2.50 U	< 2.50 U
01/07-18/2019	SW6010D	µg/L	< 2.50 U	< 2.50 U	< 2.50 U	22.9	< 2.50 U	2.7 J	< 2.50 U	4.6 J	< 2.50 U	11.2	< 2.50 U	4.0 J	< 2.50 U	< 2.50 U	< 2.50 U
01/07-18/2019	SW6020B	µg/L	< 0.10 U	--	--	--	--	--	--	--	--	--	0.19 J	--	--	--	--
09/09-13/2019	SW6010D	µg/L	< 0.90 U	< 0.90 U	7.7	22.6	1.7 J	3.6 J	< 0.90 U	5.8	2.4 J	20.4	< 0.90 U	< 0.90 U	< 0.90 U	1.6 J	< 0.90 U
03/02-05/2020	SW6010D	µg/L	< 0.90 U	< 0.90 U	9.3	3.6 J	2.4 J	5.8	< 0.90 U	7.0	2.0 J	19.8	0.90 J	6.2	1.0 J	1.7 J	< 0.90 U
08/24-28/2020	SW6010D	µg/L	< 3.9 U	< 3.9 U	7.8	9.3	< 3.9 U	4.0 J	< 3.9 U	6.9	< 3.9	16.8	< 3.9 U	6.3	< 3.9 U	< 3.9 U	< 3.9 U
02/23-25/2021	SW6010D	µg/L	< 3.9 U	< 3.9 U	< 3.9 U	7.5	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	5.9	< 3.9 U	4.0 J	< 3.9 U	< 3.9 U	< 3.9 U
08/30-9/02/2021	SW6010D	µg/L	< 3.9 U	< 3.9 U	< 3.9 U	8.5 J+	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	15.0	< 3.9 U	< 3.9 U	< 3.9 U
11/29/2021	SW6010D	µg/L	--	--	--	--	--	--	--	--	--	--	--	< 3.9 U	--	--	--
02/07-02/10/2022	SW6010D	µg/L	< 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	4.0 J	< 3.9 U	< 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	9.4	< 3.9 U	10.0	< 3.9 U	4.0 J	< 3.9 U	4.3 J	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U
11/09-11/10/2022	SW6010D	µg/L	--	--	--	9.2	--	13.2	--	--	--	--	--	--	--	--	--
02/13-02/15/2023	SW6010D	µg/L	< 1.6 U	< 1.6 U	< 1.6 U	8.1 J	< 1.6 U	15.1	< 1.6 U	2.8 J	2.2 J	2.9 J	< 1.6 U	3.1 J	< 1.6 U	2.4 J	< 1.6 U
08/21-08/23/2023	SW6010D	µg/L	< 3.9 U	< 3.9 U	< 3.9 U	6.7	< 3.9 U	17.7	< 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	< 2.6 U	< 2.6 U	< 2.6 U	4.3 J	< 2.6 U	23.1	< 2.6 U	4.0 J	< 2.6 U	< 2.6 U	< 2.6 U	< 2.6 U	< 2.6 U	< 2.6 U	< 2.6 U
08/26-27/2024	SW6010D	µg/L	< 2.6 U	< 2.6 U	< 2.6 U	6.5	< 2.6 U	11.1	< 2.6 U	3.1 J	< 2.6 U	< 2.6 U	< 2.6 U	< 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	< 4.50 U	--	--	< 4.50 U	< 4.50 U	< 4.50 U	9.6	20.0	< 4.50 U	< 4.50 U	< 4.50 U	< 0.45 U
12/06-07/2016	SW6020B	µg/L	< 4.50 U	< 4.50 U	6.4	< 4.50 U	< 4.50 U	6.2	< 4.50 U	< 4.50 U	< 4.50 U	< 4.50 U	8.3	< 4.50 U	< 4.50 U	< 4.50 U	< 4.50 U
01/18-19/2017	SW6020B	µg/L	< 4.50 U	4.5 J	6.5	< 4.50 U	< 4.50 U	< 4.50 U	< 4.50 U	< 4.50 U	< 4.50 U	< 4.50 U	15.0	< 4.50 U	< 4.50 U	< 4.50 U	< 0.45 U
02/28-03/02/2017	SW6020B	µg/L	< 4.50 U	< 4.50 U	4.7 J	< 4.50 U	< 4.50 U	< 4.50 U	< 4.50 U	< 4.50 U	< 4.50 U	< 4.50 U	13.6	< 4.50 U	< 4.50 U	< 4.50 U	< 0.45 U
04/10-12/2017	SW6020B	µg/L	< 4.50 U	< 4.50 U	< 4.50 U	< 4.50 U	< 4.50 U	< 4.50 U	< 4.50 U	< 4.50 U	< 4.50 U	< 4.50 U	13.2	< 4.50 U	< 4.50 U	< 4.50 U	0.81
05/11-12/2017	SW6020B	µg/L	< 4.50 U	< 4.50 U	< 4.50 U	< 4.50 U	< 4.50 U	< 4.50 U	< 4.50 U	< 4.50 U	< 4.50 U	< 4.50 U	10.8	< 4.50 U	< 4.50 U	< 4.50 U	< 0.45 U
06/19-20/2017	SW6020B	µg/L	< 4.50 U	< 4.50 U	< 4.50 U	< 4.50 U	< 0.45 U	< 4.50 U	< 4.50 U	< 4.50 U	< 4.50 U	< 4.50 U	12.5	< 4.50 U	< 4.50 U	< 4.50 U	< 0.45 U
07/24-25/2017	SW6020B	µg/L	< 4.50 U	< 4.50 U	< 4.50 U	< 4.50 U	< 4.50 U	< 4.50 U	< 4.50 U	< 4.50 U	< 4.50 U	< 4.50 U	9.5	< 4.50 U	< 4.50 U	< 4.50 U	< 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	< 0.90 U	< 0.90 U	< 0.90 U	3.5 J	13.6	6.5	< 0.90 U	< 0.90 U	< 0.90 U

Appendix F
Historical Laboratory Detections
Bremo Power Station, North Pond
Permit No. 618

Location			MW-11	MW-29S	MW-29D	MW-24	MW-25S	MW-25D	MW-26S	MW-26D	MW-27S	MW-27D	MW-28	MW-33	MW-34	MW-35	Field Blank
Sample Date	**Method**	**Unit**															
Nickel (continued)																	
03/02-05/2020	SW6010D	µg/L	< 0.90 U	1.6 J	3.6 J	1.8 J	< 0.90 U	1.8 J	< 0.90 U	< 0.90 U	1.5 J	4.3 J	13.0	9.9 J+	< 0.90 U	1.2 J	< 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	< 3.5 U	< 3.5 U	< 3.5 U	13.3	4.7 J	< 3.5 U	< 3.5 U	< 3.5 U
02/23-25/2021	SW6010D	µg/L	< 3.5 U	< 3.5 U	< 3.5 U	< 3.5 U	< 3.5 U	< 3.5 U	< 3.5 U	< 3.5 U	< 3.5 U	< 3.5 U	13.9	4.2 J	< 3.5 U	< 3.5 U	< 3.5 U
08/30-9/02/2021	SW6010D	µg/L	< 3.5 U	< 3.5 U	< 3.5 U	< 3.5 U	< 3.5 U	< 3.5 U	< 3.5 U	< 3.5 U	< 3.5 U	< 3.5 U	16.3	7.6	< 3.5 U	< 3.5 U	< 3.5 U
02/07-02/10/2022	SW6010D	µg/L	< 3.5 U	< 3.5 U	< 3.5 U	< 3.5 U	< 3.5 U	< 3.5 U	< 3.5 U	< 3.5 U	< 3.5 U	< 3.5 U	13.9	< 3.5 U	< 3.5 U	< 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	< 3.5 U	< 3.5 U	< 3.5 U	14.3	< 3.5 U	< 3.5 U	< 3.5 U	< 3.5 U
02/13-02/15/2023	SW6010D	µg/L	1.7 J	< 1.0 U	5.0	< 1.0 U	1.2 J	1.9 J	< 1.0 U	< 1.0 U	3.2 J	2.1 J	13.1	1.3 J	< 1.0 U	1.5 J	< 1.0 U
08/21-08/23/2023	SW6010D	µg/L	< 3.5 U	< 3.5 U	< 3.5 U	< 3.5 U	< 3.5 U	< 3.5 U	< 3.5 U	< 3.5 U	< 3.5 U	< 3.5 U	13.8	3.6 J	< 3.5 U	< 3.5 U	< 3.5 U
02/12-14/2024	SW6010D	µg/L	< 0.88 U	< 0.88 U	2.6 J	1.3 J	2.0 J	2.9 J	0.93 J	1.2 J	2.2 J	1.8 J	11.3	1.3 J	0.90 J	< 0.88 U	< 0.88 U
08/26-27/2024	SW6010D	µg/L	< 0.88 U	< 0.88 U	1.5 J	< 0.88 U	0.94 J	2.9 J	< 0.88 U	1.2 J	1.6 J	1.7 J	12.1	1.0 J	< 0.88 U	< 0.88 U	< 0.88 U
Nitrate																	
09/09-13/2019	SW9056A	mg/L	0.14	3.4	< 0.060 U	< 0.060 U	< 0.060 U	14.5	0.077 J	< 0.060 U	< 0.060 U	< 0.060 U	< 0.060 U	1.1	< 0.060 U	< 0.060 U	< 0.060 U
10/10/2019	SW9056A	mg/L	--	--	--	--	--	< 0.060 U	--	--	--	--	--	--	--	--	--
03/02-05/2020	SW9056A	mg/L	< 0.060 U	4.8	< 0.060 U	< 0.060 U	< 0.060 U	0.070 J	< 0.060 U	< 0.060 U	< 0.060 U	< 0.060 U	0.17	1.0	< 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	0.084 J	< 0.060 U	< 0.060 U	< 0.060 U	0.18	0.20	0.18	0.68	< 0.060 U	< 0.060 U	< 0.060 U
02/23-25/2021	SW9056A	mg/L	< 0.060 U	2.9	< 0.060 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 UJ	< 0.1 U	0.20	0.20	< 0.1 U	< 0.1 U	< 0.060 U
08/30-9/02/2021	SW9056A	mg/L	< 0.060 U	1.7	< 0.060 U	< 0.060 U	< 0.060 U	< 0.060 U	0.072 J	< 0.060 U	< 0.060 U	0.096 J	0.15	0.27	< 0.060 U	< 0.060 U	< 0.060 U
02/07-02/10/2022	SW9056A	mg/L	< 0.060 U	2.1	< 0.060 U	< 0.060 U	< 0.060 U	< 0.060 U	< 0.060 U	< 0.060 U	< 0.060 U	< 0.060 U	0.26	0.17	< 0.060 U	< 0.060 U	< 0.060 U
08/29-09/07/2022	SW9056A	mg/L	< 0.060 U	1.9	< 0.060 U	0.064 J	0.069 J	< 0.060 U	0.084 J	< 0.060 U	< 0.060 U	< 0.060 U	0.27	0.27	< 0.060 U	< 0.060 U	< 0.060 U
02/13-02/15/2023	SW9056A	mg/L	0.060 J	2.0	< 0.060 U	< 0.060 U	< 0.060 UJ	< 0.060 UJ	< 0.060 U	< 0.060 UJ	< 0.060 UJ	< 0.060 UJ	0.24 J	0.16	< 0.060 UJ	< 0.060 U	< 0.060 U
08/21-08/23/2023	SW9056A	mg/L	0.061 J	1.4	< 0.060 U	< 0.060 U	< 0.060 U	< 0.060 U	< 0.060 U	< 0.060 U	< 0.060 UJ	< 0.060 U	0.29 J	0.31	< 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	0.071 J	< 0.060 U	0.061 J	< 0.060 U	< 0.060 U	< 0.060 U	0.27	0.14	< 0.060 U	< 0.060 U	< 0.060 U
08/26-27/2024	SW9056A	mg/L	< 0.060 UJ	1.2 J	0.093 J	< 0.060 U	< 0.060 U	< 0.060 UJ	< 0.060 UJ	< 0.060 UJ	< 0.060 U	0.083 J	0.26 J	0.15	< 0.060 U	< 0.060 U	< 0.060 UJ
pH																	
10/27-11/01/2016	FIELD	SU	5.13	6.26	6.52	7.64	--	--	5.56	6.85	6.41	7.16	5.66	7.30	5.80	8.04	7.24
12/06-07/2016	FIELD	SU	5.12	5.49	6.82	7.06	7.08	6.73	5.59	6.75	6.46	7.26	5.90	6.58	5.91	7.30	--
01/18-19/2017	FIELD	SU	5.21	5.70	6.48	7.31	6.63	6.14	5.26	7.04	5.91	6.52	5.95	6.29	6.03	7.53	--
02/28-03/02/2017	FIELD	SU	4.93	5.56	6.87	7.12	6.50	6.59	5.56	7.03	6.21	6.68	6.05	6.24	5.90	7.22	--
04/10-12/2017	FIELD	SU	4.49	5.64	6.94	7.07	6.61	6.63	5.51	6.97	6.14	6.34	5.54	6.37	6.04	7.33	--
05/11-12/2017	FIELD	SU	5.03	5.64	6.78	7.19	6.52	6.86	5.65	6.91	6.25	6.55	5.90	6.24	5.94	7.17	--
06/19-20/2017	FIELD	SU	5.36	5.73	6.91	7.21	6.54	6.82	5.81	6.92	6.35	6.52	6.00	6.41	6.03	7.13	--
07/24-25/2017	FIELD	SU	5.64	5.82	6.98	7.28	6.66	6.95	5.85	7.03	7.06	7.51	6.50	6.96	7.16	7.10	--
09/06/2017	FIELD	SU	5.29	5.60	6.69	7.16	--	--	--	--	--	6.53	--	6.54	6.12	7.24	--
01/29-30/2018	FIELD	SU	5.33	5.97	6.80	7.52	6.95	--	5.87	--	6.41	6.63	6.15	6.53	6.13	7.21	--
03/26-28/2018	FIELD	SU	--	--	--	--	--	--	--	--	--	--	--	6.39	6.02	7.34	--
04/30-05/01/2018	FIELD	SU	4.94	5.72	6.93	7.38	--	--	--	--	--	6.3	--	6.36	5.95	7.27	--
10/15-16/2018	FIELD	SU	5.32	5.70	6.99	7.40	--	--	--	--	--	6.43	--	6.49	5.97	7.22	--
01/07-18/2019	FIELD	SU	4.97	5.51	6.86	6.75	6.44	6.98	6.43	7.18	6.54	6.78	6.15	6.49	6.11	7.26	--
3/19-28/2019	FIELD	SU	--	--	--	--	--	--	--	--	--	--	--	6.26	5.87	6.82	--
09/09-13/2019	FIELD	SU	5.20	5.53	6.65	7.22	6.63	6.75	5.50	6.25	6.32	6.31	6.03	6.65	6.36	7.28	--
11/18-20/2019	FIELD	SU	5.63	5.47	6.85	5.08	6.23	6.61	5.78	6.49	6.43	6.71	6.10	6.35	5.95	6.76	--
03/02-05/2020	FIELD	SU	5.18	5.58	6.75	6.03	6.11	6.40	5.41	6.52	6.39	6.12	5.99	6.08	5.76	6.86	--
06/02-05/2020	FIELD	SU	5.16	5.54	6.77	6.18	6.31	6.56	5.84	6.55	6.20	6.33	5.86	6.41	6.06	6.86	--
08/24-28/2020	FIELD	SU	8.07	5.40	6.93	6.08	5.97	6.28	5.90	6.65	6.11	6.14	6.26	6.47	5.93	6.66	--
12/01-03/2020	FIELD	SU	5.31	5.81	7.19	6.35	6.26	6.79	5.97	6.75	6.56	6.52	6.20	6.59	6.22	6.85	--
02/23-25/2021	FIELD	SU	5.01	5.52	8.84	6.29	6.47	6.58	5.78	6.40	6.70	6.70	6.50	6.80	6.13	6.90	--
04/16/2021	FIELD	SU	--	--	--	--	--	6.59	--	--	--	--	--	--	--	--	--
06/07-09/2021	FIELD	SU	5.01	5.51	6.92	6.36	6.47	6.44	5.87	6.45	6.31	6.27	6.02	6.52	6.03	6.64	--
08/30-9/02/2021	FIELD	SU	5.27	5.58	6.66	6.45	6.19	6.28	5.55	6.17	6.30	6.15	5.74	6.33	5.70	6.53	--
02/07-02/10/2022	FIELD	SU	5.41	5.44	6.84	6.34	6.15	6.36	5.81	6.50	6.55	6.13	6.09	6.69	6.09	6.59	--
08/29-09/07/2022	FIELD	SU	4.94	5.40	7.44	6.57	6.33	6.28	5.53	6.24	6.42	6.20	5.95	6.60	5.89	6.59	--
02/13-02/15/2023	FIELD	SU	5.03	4.86	6.41	6.20	6.40	6.44	5.30	6.53	6.44	6.29	5.95	6.67	6.08	6.44	--
08/21-08/23/2023	FIELD	SU	5.22	5.29	7.03	6.29	6.54	6.32	5.81	6.51	6.51	6.18	5.84	6.44	6.13	6.32	--
10/11/2023	FIELD	SU	--	--	--	--	--	--	--	--	6.19	6.29	--	6.71	--	--	--
02/12-14/2024	FIELD	SU	5.02	5.62	7.05	6.37	6.55	6.42	5.48	6.18	6.44	6.13	6.00	6.64	6.11	6.16	--
08/26-27/2024	FIELD	SU	5.14	5.35	7.12	6.39	6.58	5.82	5.63	6.28	6.34	6.23	5.90	6.62	6.00	6.40	--
Radium, 226 and 228 Combined																	
10/27-11/01/2016	CALC	pCi/L	0.858 U	0.624 U	0.537 U	0 U	--	--	1.79	0.856 U	0.770 U	1.49 U	0.974 U	2.04 U	0.470 U	1.14 U	0.295 U
12/06-07/2016	CALC	pCi/L	0.0837 U	0.169 U	1.27 U	1.60 U	1.43 U	1.59 U	0 U	0.561 U	0.814 U	1.12 U	0.910 U	1.30 U	0.342 U	1.59	0.166 U
01/18-19/2017	CALC	pCi/L	0.526 U	0.865 U	0.329 U	0.376 U	0.256 U	0.798 U	0.244 U	0.0631 U	0.190 U	1.38 U	0.365 U	1.09 U	0.198 U	0.419 U	0.0736 U
02/28-03/02/2017	CALC	pCi/L	0.00490 U	0.729 U	1.39 U	2.24	0.160 U	2.28 U	1.57 U	1.54 U	0.797 U	0.830 U	0.397 U	0.290 U	1.78 U	0.892 U	0.699 U
04/10-12/2017	CALC	pCi/L	0.367 U	0.672 U	1.28	1.45 U	1.27 U	1.59	0.448 U	1.25 U	1.18	1.07	0.638 U	1.30 U	0.567 U	1.86	0.494 U
05/11-12/2017	CALC	pCi/L	0.205 U	0.602 U	0.381 U	0.942 U	0.770 U	2.05	0.163 U	0.286 U	0.381 U	0.692 U	0.902 U	1.05 U	0.631 U	1.68 U	0 U
06/19-20/2017	CALC	pCi/L	0.796 U	0.743 U	1.32 U	0.930 U	1.06 U	2.67	0.490 U	1.18 U	1.31 U	1.36 U	0.412 U	1.31 U	0.727 U	2.36	1.15 U
07/24-25/2017	CALC	pCi/L	0.233 U	0.288 U	0.303 U	0.532 U	0.146 U	2.28	0.337 U	0.546 U	0.782 U	1.18 U	0.570 U	0.855 U	0.457 U	2.78	0.970 U
01/29-30/2018	CALC	pCi/L	0.477 U	1.01 U	0.635 U	0.640 U	0.722 U	--	0.641 U	--	1.88	0.779 U	1.11 U	1.67	0.952 U	1.77	0.325 U
04/30-05/01/2018	CALC	pCi/L	0.287 U	0.0797 U	0.864 U	1.10 U	--	--	--	--	--	1.36 U	--	0.440 U	0.160 U	0.839 U	0.626 U
10/15-16/2018	RA226RA228	pCi/L	1.37	0.534	1.27	2.00	--	--	--	--	--	1.43	--	1.61	0.564	1.56	0.605
01/07-18/2019	RA226RA228	pCi/L	0.893 U	0.690 U	1.69	2.70	0.881 U	1.61	1.11 U	0.279 U	1.18 U	1.38 U	0.495 U	1.35 U	1.41	2.42	1.05 U
09/09-13/2019	RA226RA228	pCi/L	0.883 U	0.385 U	1.58	2.18	0.381 U	3.15	0.601 U	1.97	1.06 U	1.96	1.60	2.66	0.486 U	2.92	0.504 U
03/02-05/2020	RA226RA228	pCi/L	0.374 U	0.813 U	4.16	4.49 J	0.984 UJ	2.46 J	0.819 UJ	0.753 U	1.04 UJ	1.33 UJ	0.883 UJ	1.01 UJ	0.695 UJ	1.96 J	0.672 U
08/24-28/2020	RA226RA228	pCi/L	0.371 U	1.21	1.95	3.65	0.540 U	2.65	0.627 U	0.588 U	0.900 U	0.243 U	0.433 U	0.273 U	0.473 U	1.88	0.449 U
02/23-25/2021	RA226RA228	pCi/L	0.235 U	0.241 U	0.792 J	2.98 J	1.51 J	3.14 J	0.859 U	1.35 J	1.05 J	0.836 U	0.797 U	1.15 J	0.754 U	1.94 J	0.574 U
08/30-9/02/2021	RA226RA228	pCi/L	1.03 J	1.68 J	1.40 J	3.02	0.0727 U	1.17 J	0.643 U	0.605 J	2.00	0.238 U	0.0942 U	1.18 J	0.177 UJ	1.30 J	0.209 J
02/07-02/10/2022	RA226RA228	pCi/L	0.0765 U	0.145 U	1.43 J	4.26 J	0.578 U	2.47 J-	0.0304 UJ	0.535 J	2.38 J-	1.79 J	0.459 J	0.801 U	0.256 U	3.98 U	0.696 J
08/29-09/07/2022	RA226RA228	pCi/L	0.404 U	1.05 U	1.46 U	3.00 J	0.481 J	2.79 U	0.153 U	0.685 J	0.828 J	3.49 J	1.89 U	1.29 J	2.84 J	3.46 J	0.160
02/13-02/15/2023	RA226RA228	pCi/L	0.662 U	0.331 UJ	2.37 J	2.00 J	1.88 J	1.96 J	1.04 J	1.19 J	1.45 J	0.856 J	0.860 J	< 0.389	1.52 J	2.44 J	0.978 J
08/21-08/23/2023	RA226RA228	pCi/L	1.09 U	0.847 U	1.37 U	2.78 J	0.510 U	3.04	0.908	1.40 U	1.21	1.62 U	1.10 U	1.72 U	2.90 J	3.41	1.33 J+
02/12-14/2024	RA226RA228	pCi/L	0.717 U	0.635 J	1.44 J	2.23 J+	0.938 U	2.12 J	0.379 U	0.538 J	0.932 J	0.884 U	0.614 J	0.729 U	0.171 U	2.38 J+	0.841 J
08/26-27/2024	RA226RA228	pCi/L	0.590 U	1.07 J	2.45 J+	1.64 J	0.937 J+	1.28 J+	0.312 J	0.313 J	1.75 J+	1.53 J+	1.10 J+	0.412 U	0.216 U	1.19 J	0.285 U
Selenium																	
10/27-11/01/2016	SW6020B	µg/L	< 3.20 U	< 3.20 U	< 3.20 U	< 3.20 U	--	--	< 3.20 U	< 3.20 U	< 3.20 U	< 3.20 U	6.2	< 3.20 U	< 3.20 U	< 3.20 U	< 0.32 U
12/06-07/2016	SW6020B	µg/L	< 3.20 U	< 3.20 U	< 3.20 U	< 3.20 U	< 3.20 U	< 3.20 U	< 3.20 U	< 3.20 U	< 3.20 U	4 J	4.6 J	< 3.20 U	< 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	< 3.20 U	< 3.20 U	< 3.20 U	< 3.20 U	< 3.20 U	< 3.20 U	< 3.20 U	4.8 J	< 3.20 U	< 3.20 U	< 3.20 U	< 0.32 U
02/28-03/02/2017	SW6020B	µg/L	< 3.20 U	< 3.20 U	< 3.20 U	< 3.20 U	< 3.20 U	< 3.20 U	< 3.20 U	< 3.20 U	< 3.20 U	< 3.20 U	4.2 J	< 3.20 U	< 3.20 U	< 3.20 U	< 0.32 U
04/10-12/2017	SW6020B	µg/L	< 3.20 U	< 3.20 U	< 3.20 U	< 3.20 U	< 3.20 U	< 3.20 U	< 3.20 U	< 3.20 U	< 3.20 U	< 3.20 U	5.4	< 3.20 U	< 3.20 U	< 3.20 U	< 0.32 U
05/11-12/2017	SW6020B	µg/L	< 3.20 U	< 3.20 U	< 3.20 U	< 3.20 U	< 3.20 U	4.5 J	< 3.20 U	< 3.20 U	< 3.20 U	< 3.20 U	< 3.20 U	< 3.20 U	< 3.20 U	< 3.20 U	< 0.32 U
06/19-20/2017	SW6020B	µg/L	< 0.32 U	< 0.32 U	< 0.32 U	< 3.20 U	< 0.32 U	< 3.20 U	< 0.32 U	< 0.32 U	< 3.20 U	< 0.32 U	< 0.32 U	< 3.20 U	< 3.20 U	< 3.20 U	< 0.32 U
07/24-25/2017	SW6020B	µg/L	< 3.20 U	< 3.20 U	< 3.20 U	< 3.20 U	< 3.20 U	< 3.20 U	< 3.20 U	< 3.20 U	< 3.20 U	< 3.20 U	< 3.20 U	< 3.20 U	< 3.20 U	< 3.20 U	< 0.32 U
01/29-30/2018	SW6010	µg/L	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	--	5.3 J	--	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
01/07-18/2019	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	5.3 J	< 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	< 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	< 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	5.3 J	< 4.7 U	< 4.7 U	5.7 J	5.2 J	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U
02/23-25/2021	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	4.8 J	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U
08/30-9/02/2021	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	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U	< 4.7 U
02/07-02/10/2022	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	6.4 J	< 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	< 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	< 4.7 U
02/13-02/15/2023	SW6010D	µg/L	< 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	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U
08/21-08/23/2023	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	< 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	< 4.1 U	< 4.1 U	< 4.1 U	< 4.1 U	< 4.1 U
08/26-27/2024	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	< 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	< 0.80 U	--	--	< 0.80 U	< 0.80 U	< 0.80 U	7.8	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.08 U
12/06-07/2016	SW6020B	µg/L	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	2 J	< 0.80 U	< 0.80 U	< 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	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.08 U
02/28-03/02/2017	SW6020B	µg/L	< 0.80 U	< 0.80 U	1.8 J	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	0.96 J	< 0.80 U	0.97 J	< 0.80 U	< 0.80 U	< 0.08 U
04/10-12/2017	SW6020B	µg/L	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	0.89 J	< 0.80 U	< 0.80 U	< 0.80 U	1.5 J	< 0.80 U	< 0.80 U	2.2 J	< 0.80 U	< 0.08 U
05/11-12/2017	SW6020B	µg/L	< 0.80 U	< 0.80 U	1.5 J	1.6 J	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	3 J	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.08 U
06/19-20/2017	SW6020B	µg/L	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.080 U	< 0.80 U	< 0.80 U	< 0.80 U	5.1	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.08 U
07/24-25/2017	SW6020B	µg/L	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.08 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	3.7 J	< 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	5.7	< 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	< 2.5 U	4.7 J	< 2.5 U	< 2.5 U	< 2.5 U

Appendix F
Historical Laboratory Detections
Bremo Power Station, North Pond
Permit No. 618

Location			MW-11	MW-29S	MW-29D	MW-24	MW-25S	MW-25D	MW-26S	MW-26D	MW-27S	MW-27D	MW-28	MW-33	MW-34	MW-35	Field Blank
Sample Date	**Method**	**Unit**															
Silver (continued)																	
02/23-25/2021	SW6010D	µg/L	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	3.1 J	< 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
08/30-9/02/2021	SW6010D	µg/L	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	4.5 J	< 2.5 U	< 2.5 U	< 2.5 U	2.9 J	< 2.5 U	< 2.5 U	8.0	< 2.5 U	< 2.5 U	< 2.5 U
02/07-02/10/2022	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	< 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	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U
02/13-02/15/2023	SW6010D	µg/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	2.2 J	< 1.0 U	< 1.0 U	< 2.5 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
08/21-08/23/2023	SW6010D	µg/L	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	4.2 J	3.5 J	< 2.5 U	< 2.5 U	7.6	8.1	3.6 J	8.2	< 2.5 U	< 2.5 U	< 2.5 U
10/11/2023	SW6010D	µg/L	--	--	--	--	--	--	--	--	< 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	4.2 J	5.8	< 0.49 U	0.52 J	0.95 J	1.4 J	< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U
04/11/2024	SW6010D	µg/L	--	--	--	--	--	< 0.49 U	--	--	--	--	--	--	--	--	< 0.49 U
08/26-27/2024	SW6010D	µg/L	< 0.49 U	< 0.49 U	< 0.49 U	< 0.49 U	2.2 J	< 0.49 U	< 0.49 U	0.92 J	2.5 J	0.74 J	< 0.49 U	< 0.49 U	0.51 J	< 0.49 U	< 0.49 U
Sulfate																	
10/27-11/01/2016	SW9056A	mg/L	6.5	35.2	64.2	26.3	--	--	17.7	47.5	194	694	255	41.1	31.7	31.8	< 0.40 U
12/06-07/2016	SW9056A	mg/L	7.0	13.5	169	36.0	50.0	27.1	9.7	35.1	181	870	228	53.3	30.0	19.1	0.55 J
01/18-19/2017	SW9056A	mg/L	7.1	24.2	179	36.0	111	23.6	10.3	43.0	199	808	245	54.6	31.4	21.6	< 0.40 U
02/28-03/02/2017	SW9056A	mg/L	7.1	28.1	152	41.2	116	20.8	8.6	43.3	178	654	228	51.3	29.5	20.8	< 0.40 U
04/10-12/2017	SW9056A	mg/L	6.1	29.7	134	46.3	95.2	15.1	11.6	46.5	187	698	252	47.0	29.8	24.1	< 0.40 U
05/11-12/2017	SW9056A	mg/L	7.4	35.0	128	27.1	101	12.8	12.9	49.2	155	572	213	50.9	29.3	26.6	< 0.50 U
06/19-20/2017	SW9056A	mg/L	8.2	40.3	138	25.2	90.2	13.0	13.8	51.7	172	554	221	52.1	30.7	30.4	< 0.50 U
07/24-25/2017	SW9056A	mg/L	6.6	37.2	118	24.6	71.7	11.1	11.6	55.2	156	480	200	47.0	28.2	28.3	< 0.50 U
09/06/2017	E300	mg/L	6.7	35.4	118	24.7	--	--	--	--	--	463	--	44.0	27.0	27.7	< 0.50 U
04/30-05/01/2018	E300	mg/L	6.2	26.2	99.6	28.1	--	--	--	--	--	408	--	42.5	27.0	31.2	< 0.50 U
10/15-16/2018	E300	mg/L	6.5	49.4	112	32.8	--	--	--	--	--	302	--	47.0	27.5	34.6	< 0.50 U
01/07-18/2019	E300	mg/L	7.0	24.4	105	28.1	31.7	17.2	28.1	63.3	146	299	153	46.2	28.0	36.1	< 0.50 U
09/09-13/2019	SW9056A	mg/L	7.3	19.8	95.6	41.8	31.0	20.6	19.8	53.3	133	268	139	52.4	33.2	37.0	< 0.50 U
03/02-05/2020	SW9056A	mg/L	7.3	29.9	91.3	25.3	30.4	25.6	11.5	52.5	134	277	119	47.8	31.4	34.8	< 0.50 U
08/24-28/2020	SW9056A	mg/L	6.8	27.2	73.4	42.1	28.1	21.3	10.6	51.5	126	264	111	45.1	33.3	35.5	< 0.50 U
02/23-25/2021	SW9056A	mg/L	7.4	20.5	66.7	36.4 J-	25.3	20.2	11.2	49.4	136	261 J-	109	34.2 J-	34.0 J-	35.4 J-	< 0.50 U
08/30-9/02/2021	SW9056A	mg/L	5.2	10.8	59.4	36.6	21.9	23.1	14.7	47.8	149	206	111	33.2	32.2	35.3	< 0.50 U
02/07-02/10/2022	SW9056A	mg/L	6.5	15.4	60.2	37.6	16.1	20.6	8.9	44.1	146	216	106	33.0	35.5	36.1	< 0.50 U
08/29-09/07/2022	SW9056A	mg/L	5.2	14.3	61.9	33.2	15.7	21.0	6.7	47.0	153	206	103	34.1	35.3	36.2	< 0.50 U
02/13-02/15/2023	SW9056A	mg/L	5.0	15.4	74.9	39.9	15.3	20.7	5.0	46.1	155	209	95.5	34.1	37.4	37.3	< 0.50 U
08/21-08/23/2023	SW9056A	mg/L	5.3	8.6	39.9	36.6	13.6	17.9	3.2	40.0	150 J-	173	99.6 J-	31.7	32.6	33.4	< 0.50 U
02/12-14/2024	SW9056A	mg/L	6.3	7.5	26.4	36.7	14.5	19.7	2.6	48.5	153	191	97.3	30.9	37.4	36.0	< 0.50 U
08/26-27/2024	SW9056A	mg/L	5.0	9.3	27.3	39.5	15.6	18.6	2.1	51.0	155	186	93.6	31.7	35.9	35.1	< 2.0 U
Thallium																	
10/27-11/01/2016	SW6020B	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	< 0.20 U	< 0.20 U	< 0.020 U
12/06-07/2016	SW6020B	µg/L	< 0.20 U	< 0.20 U	0.32 J	< 0.20 U	< 0.20 U	< 0.20 U	0.43 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
01/18-19/2017	SW6020B	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	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.020 U
02/28-03/02/2017	SW6020B	µg/L	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	0.27 J	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.020 U
04/10-12/2017	SW6020B	µg/L	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	0.28 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	0.28 J	< 0.020 U
05/11-12/2017	SW6020B	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	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.020 U
06/19-20/2017	SW6020B	µg/L	< 0.20 U	0.26 J	< 0.20 U	< 0.20 U	< 0.020 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	0.38 J	< 0.020 U
07/24-25/2017	SW6020B	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	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.020 U
01/29-30/2018	SW6020	µg/L	< 0.028 U	< 0.028 U	< 0.028 U	< 0.028 U	< 0.028 U	--	< 0.028 U	--	< 0.028 U	< 0.028 U	< 0.028 U	< 0.028 U	< 0.028 U	< 0.028 U	< 0.028 U
01/07-18/2019	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	< 0.060 U	< 0.060 U	< 0.060 U	< 0.060 U	< 0.060 U
09/09-13/2019	SW6020B	µg/L	< 0.060 U	< 0.060 U	< 0.12 U	< 0.060 U	< 0.060 U	< 0.060 U	< 0.060 U	< 0.060 U	< 0.18 U	< 0.30 U	< 0.18 U	< 0.060 U	< 0.060 U	< 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	< 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	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
02/23-25/2021	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	< 0.25 U	< 0.050 U	< 0.050 U	< 0.25 U	< 0.050 U	< 0.050 U
08/30-9/02/2021	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	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
02/07-02/10/2022	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	< 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	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
02/13-02/15/2023	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	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
08/21-08/23/2023	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	< 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	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U	< 0.050 U
08/26-27/2024	SW6020B	µg/L	< 0.028 U	< 0.026 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	< 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	< 0.70 U	--	--	< 0.70 U	1.7 J	< 0.70 U	1.7 J	< 0.70 U	0.91 J	< 0.70 U	< 0.70 U	< 0.070 U
12/06-07/2016	SW6020B	µg/L	0.8 J	1.2 J	1.9 J	2.1 J	1.5 J	1.5 J	4.5 J	1.3 J	1.6 J	2 J	1.6 J	2.2 J	0.8 J	0.96 J	< 0.70 U
01/18-19/2017	SW6020B	µg/L	3.2 B	2.6 B	12.8	3.4 B	1.2 B	< 0.70 U	< 0.70 U	1.1 B	3.2 B	3.5 B	< 0.70 U	3.8 B	< 0.70 U	< 0.70 U	1.4
02/28-03/02/2017	SW6020B	µg/L	< 0.70 U	< 0.70 U	2.5 J	0.95 J	0.75 J	< 0.70 U	< 0.70 U	1.3 J	< 0.70 U	< 0.70 U	< 0.70 U	2.6 J	1.1 J	< 0.70 U	0.14 J
04/10-12/2017	SW6020B	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	10.4 J+	< 0.70 U	0.7 J+	< 0.70 U	0.73	
05/11-12/2017	SW6020B	µg/L	1 J+	1.8 J+	3 J	< 0.70 U	1.0 J+	2.9 J+	1.9 J+	1.0 J+	1.4 J+	2.4 J+	1.5 J+	1.6 J+	< 0.70 U	< 0.70 U	0.12 J+
06/19-20/2017	SW6020B	µg/L	< 0.70 U	< 0.70 U	1.2 J	< 0.70 U	< 0.070 U	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	0.76 J	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	0.14 J
07/24-25/2017	SW6020B	µg/L	< 0.70 U	< 0.70 U	1 J	0.76 J	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	1.2 J	< 0.70 U	< 0.70 U	2.1
09/09-13/2019	SW6020B	µg/L	< 0.090 U	< 0.090 U	0.45 J	0.17 J	0.19 J	0.25 J	0.45 J	0.47 J	0.53 J	1.1 J	< 0.27 U	0.14 J	< 0.090 U	< 0.090 U	< 0.090 U
03/02-05/2020	SW6020B	µg/L	< 0.090 U	0.16 J	1.3	0.38 J	0.39 J	0.31 J	0.21 J	0.55	0.56	2.5	< 0.090 U	0.52	< 0.090 U	0.22 J	< 0.090 U
08/24-28/2020	SW6020B	µg/L	< 0.24 U	< 0.24 U	0.65	< 0.24 U	< 0.24 U	< 0.24 U	0.33 J	0.32 J	< 0.24 U	0.69	0.47 J	0.75	< 0.24 U	< 0.24 U	< 0.24 U
02/23-25/2021	SW6020B	µg/L	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	0.70 J	0.87 J	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	0.58 J	< 0.43 U	< 0.43 U	< 0.43 U
08/30-9/02/2021	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	< 0.43 U	2.0	< 0.43 U	< 0.43 U	< 0.43 U
11/29/2021	SW6020B	µg/L	--	--	--	--	--	--	--	--	--	--	--	< 0.43 U	--	--	--
02/07-02/10/2022	SW6020B	µg/L	< 0.43 U	< 0.43 U	0.50 J	< 0.43 U	0.47 J	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	0.49 J	< 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	0.47 J	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	0.49 J	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U
02/13-02/15/2023	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	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U
08/21-08/23/2023	SW6020B	µg/L	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	0.58 J	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	0.62 J	< 0.43 U	1.1	< 0.43 U	< 0.43 U	< 0.43 U
10/11/2023	SW6020B	µg/L	--	--	--	--	--	--	--	--	--	--	--	0.53 J	--	--	< 0.43 U
02/12-14/2024	SW6020B	µg/L	< 0.43 U	< 0.43 U	< 0.43 U	< 0.43 U	0.74 J	< 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
08/26-27/2024	SW6020B	µg/L	< 0.14 U	< 0.14 U	0.24 J	< 0.14 U	0.16 J	< 0.14 U	< 0.14 U	< 0.14 U	< 0.14 U	< 0.14 U	< 0.14 U	0.25 J	< 0.14 U	< 0.14 U	< 0.14 U
Total Dissolved Solids																	
10/27-11/01/2016	SM2540C	mg/L	148	199	179	176	--	--	147	273	632	1150	603	270	226	246	< 25.0 U
12/06-07/2016	SM2540C	mg/L	360	142	540	224	245	181	130	254	624	1550	621	302	226	267	< 25.0 U
01/18-19/2017	SM2540C	mg/L	127	161	518	247	376	179	114	264	644	1380	638	325	192	237	< 25.0 U
02/28-03/02/2017	SM2540C	mg/L	134	194	544	277	433	200	121	331	644	1200	611	340	284	284	< 25.0 U
04/10-12/2017	SM2540C	mg/L	150	209	549	320	388	198	147	317	651	1310	820	374	240	287	< 25.0 U
05/11-12/2017	SM2540C	mg/L	132	200	525	275	394	194	124	296	552	1160	508	360	239	289	< 25.0 U
06/19-20/2017	SM2540C	mg/L	148	220	570	252	364	200	116	303	605	1220	635	333	227	281	< 25.0 U
07/24-25/2017	SM2540C	mg/L	129	211	542	254	343	228	125	299	582	1090	606	328	234	291	< 25.0 U
09/06/2017	SM2540C	mg/L	136	208	541	251	--	--	--	--	--	1140	--	342	240	278	< 25.0 U
04/30-05/01/2018	SM2540C	mg/L	141	178	612	283	--	--	--	--	--	1050	--	340	252	294	< 25.0 U
10/15-16/2018	SM2540C	mg/L	145	250	559	311	--	--	--	--	--	876	--	385	254	303	< 25.0 U
01/07-18/2019	SM2540C	mg/L	138	167	546	322	271	224	146	300	588	874	535	451	261	297	< 25.0 U
09/09-13/2019	SM2540C	mg/L	41.0	152	580	294	172	309	133	300	572	752	203	394	247	264	< 25.0 U
03/02-05/2020	SM2540C	mg/L	131	169	498	522	288	177	101	312	568	882	426	387	237	291	< 25.0 U
08/24-28/2020	SM2540C	mg/L	144	196	492	428	268	222	130	302	624	860	419	373	255	300	27.0
02/23-25/2021	SM2540C	mg/L	153	169	257	366	247	214	141	301	634	868	423	342	275	293	< 25.0 U
08/30-9/02/2021	SM2540C	mg/L	137	126	429	324	231	181	126	269	631	768	436	337	257	273	< 25.0 U
02/07-02/10/2022	SM2540C	mg/L	133	137	447	376	230	173	112	269	646	712	385	331	248	283	< 25.0 U
08/29-09/07/2022	SM2540C	mg/L	138	143	429	333	235	182	107	274	647	681	379	346	239	276	< 25.0 U
02/13-02/15/2023	SM2540C	mg/L	145	144	435	343	237	188	105	277	665	661	367	343	261	311	< 25.0 U
08/21-08/23/2023	SM2540C	mg/L	153	135	488	361	242	182	110	267	668	687	379	341	263	323	< 25.0 U
02/12-14/2024	SM2540C	mg/L	149	124	467	305	232	178	105	284	670	666	343	329	254	285	< 10.0 U
08/26-27/2024	SM2540C	mg/L	152	119	448	347	222	173	104	273	663	694	375	328	263	295	< 25.0 U
Vanadium																	
10/27-11/01/2016	SW6020B	µg/L	12.1	6.4	2.6 J	< 0.70 U	--	--	1.1 J	2.0 J	2.0 J	3.5 J	3.5 J	2.7 J	2.4 J	< 0.70 U	< 0.07 U
12/06-07/2016	SW6020B	µg/L	22.5	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	0.70 J	1.2 J	< 0.70 U	0.89 J	1.2 J	< 0.70 U	< 0.70 U
01/18-19/2017	SW6020B	µg/L	15	< 0.70 U	0.96 J	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	1.9 J	0.83 J	1.6 J	1.4 J	0.78 J	< 0.70 U	< 0.07 U
02/28-03/02/2017	SW6020B	µg/L	12.8	0.85 J	0.99 J	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	1.2 J	0.81 J	2.0 J	1.1 J	< 0.70 U	< 0.70 U	< 0.07 U
04/10-12/2017	SW6020B	µg/L	10.7	0.88 J	1.2 J	< 0.70 U	1.0 J	< 0.70 U	1.2 J	< 0.70 U	6.8	0.72 J	2.5 J	1.7 J	< 0.70 U	< 0.70 U	< 0.07 U
05/11-12/2017	SW6020B	µg/L	11.7	0.86 J	0.86 J	< 0.70 U	< 0.70 U	0.92 J	0.85 J	< 0.70 U	2.5 J	1.1 J	2.2 J	1.1 J	0.92 J	< 0.70 U	< 0.07 U
06/19-20/2017	SW6020B	µg/L	10.4	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	2.2 J	< 0.70 U	2.0 J	1.9 J	0.77 J	< 0.70 U	< 0.07 U
07/24-25/2017	SW6020B	µg/L	9.1	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	< 0.70 U	1.5 J	< 0.70 U	1.9 J	1.6 J	0.95 J	< 0.70 U	< 0.07 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	3.9 J	< 1.3 U	4.1 J	< 1.3 U	1.8 J	< 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	2.0 J	< 1.3 U	1.3 J	1.7 J	< 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	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U

Appendix F
Historical Laboratory Detections
Bremo Power Station, North Pond
Permit No. 618

		Location	MW-11	MW-29S	MW-29D	MW-24	MW-25S	MW-25D	MW-26S	MW-26D	MW-27S	MW-27D	MW-28	MW-33	MW-34	MW-35	Field Blank
Sample Date	**Method**	**Unit**															
Vanadium (continued)																	
02/23-25/2021	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	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U
08/30-9/02/2021	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	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U
02/07-02/10/2022	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	< 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	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U
02/13-02/15/2023	SW6010D	µg/L	9.9 J	1.9 J	1.6 J	< 1.0 U	1.1 J	2.7 J	< 1.0 U	1.3 J	4.1 J	< 1.0 U	3.1 J	2.1 J	1.1 J	1.4 J	< 1.0 U
08/21-08/23/2023	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	< 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	3.3 J	< 1.6 U	2.0 J	2.0 J	< 1.6 U	< 1.6 U	< 1.6 U
08/26-27/2024	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	4.2 J	< 1.6 U	2.0 J	2.3 J	< 1.6 U	< 1.6 U	< 1.6 U
Zinc																	
10/27-11/01/2016	SW6020B	µg/L	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	--	--	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	2.7 J
12/06-07/2016	SW6020B	µg/L	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24 U
01/18-19/2017	SW6020B	µg/L	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 2.40 U
02/28-03/02/2017	SW6020B	µg/L	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	4.3 J
04/10-12/2017	SW6020B	µg/L	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 2.40 U
05/11-12/2017	SW6020B	µg/L	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	27.5 J	< 24.0 U	< 24.0 U	< 2.40 U
06/19-20/2017	SW6020B	µg/L	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 2.40 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	32.8 J	< 24.0 U	< 24.0 U	< 2.40 U
07/24-25/2017	SW6020B	µg/L	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	< 24.0 U	26.1 J	< 24.0 U	< 24.0 U	< 2.40 U
09/09-13/2019	SW6010D	µg/L	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	6.3 J	< 3.9 U	< 3.9 U	< 3.9 U	10.4	< 3.9 U	11.5	< 3.9 U	< 3.9 U	< 3.9 U
03/02-05/2020	SW6010D	µg/L	< 3.9 U	< 3.9 U	11.5	< 3.9 U	8.4 J	< 3.9 U	< 3.9 U	< 3.9 U	< 3.9 U	12.3	< 3.9 U	33.6	< 3.9 U	< 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	< 9.5 U	24.2	< 9.5 U	< 9.5 U	< 9.5 U
02/23-25/2021	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	< 9.5 U	9.6 J	< 9.5 U	< 9.5 U	< 9.5 U
08/30-9/02/2021	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	10.4	< 9.5 U	30.6	< 9.5 U	67.3	< 9.5 U
11/29/2021	SW6010D	µg/L	--	--	--	--	--	--	--	--	--	--	--	< 9.5 U	--	< 9.5 U	--
02/07-02/10/2022	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	< 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	< 9.5 U	10.7	< 9.5 U	< 9.5 U	< 9.5 U
11/09-11/10/2022	SW6010D	µg/L	--	--	--	--	--	--	--	--	--	--	--	11.7	--	--	--
02/13-02/15/2023	SW6010D	µg/L	< 11.0 U	< 11.0 U	< 11.0 U	< 11.0 U	< 11.0 U	< 11.0 U	< 11.0 U	< 11.0 U	< 11.0 U	< 11.0 U	< 11.0 U	< 11.0 U	< 11.0 U	< 11.0 U	< 11.0 U
08/21-08/23/2023	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	< 9.5 U	12.5	< 9.5 U	< 9.5 U	< 9.5 U
10/11/2023	SW6010D	µg/L	--	--	--	--	--	--	--	--	--	--	--	26.8	--	--	< 9.5 U
02/12-14/2024	SW6010D	µg/L	< 3.0 U	< 3.0 U	5.8 J	12.0	4.9 J	5.6 J	< 3.0 U	< 3.0 U	< 3.0 U	8.3 J	< 3.0 U	17.4	< 3.0 U	< 3.0 U	< 3.0 U
04/11/2024	SW6010D	µg/L	--	--	--	< 3.2 U	--	--	--	--	--	--	--	--	--	--	< 3.0 U
08/26-27/2024	SW6010D	µg/L	< 3.0 U	< 3.0 U	4.8 J	< 3.0 U	< 3.0 U	4.4 J	< 3.0 U	< 3.0 U	< 3.0 U	5.2 J	< 3.0 U	18.9	< 3.0 U	< 3.0 U	< 3.0 U

Notes: µg/L = Microgram per liter
mg/L = Milligram per liter
pCi/L = picoCurie per liter
J = Estimated concentration
J+ = Potential bias high
U = Not detected above the method detection limit
UJ = Not detected, reporting limit may or may not be higher due to a bias indentified during data validation
-- = Not Sampled

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APPENDIX G
DATA VALIDATION FORMS

APPENDIX G.1
DATA VALIDATION FORMS
FIRST SEMI-ANNUAL GROUNDWATER MONITORING EVENT
(FEBRUARY 2024)

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:

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

ENVIRONMENTAL® STANDARDS
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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:

92713247

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
021324NMW34	MW-34	N	EPA 350.1	Nitrogen, Ammonia	N	0.045	J	RL	0.031	0.10		mg/L
021324NMW34	MW-34	N	SW-846 6010D	Nickel	T	0.90	J	RL	0.88	5.0		ug/L
021324NMW34	MW-34	N	SW-846 7199	Chromium, Hexavalent	D	0.31	J	H	0.050	0.050		ug/L
021324NMW34	MW-34	N	SW-846 7470A	Mercury	T	0.15	J	RL	0.12	0.20		ug/L
021324NMW34	MW-34	N	SW-846 9056A	Fluoride	N	0.052	J	RL	0.050	0.10		mg/L
021424NMW24	MW-24	N	SW-846 6010D	Molybdenum	T	4.3	J	RL	2.6	5.0		ug/L
021424NMW24	MW-24	N	SW-846 6010D	Nickel	T	1.3	J	RL	0.88	5.0		ug/L
021424NMW24	MW-24	N	SW-846 6020B	Lead	T	0.13	J	RL	0.077	1.0		ug/L
021424NMW24	MW-24	N	SW-846 9056A	Fluoride	N	0.061	J	RL	0.050	0.10		mg/L
021424NMW27D	MW-27D	N	SW-846 6010D	Copper	T		U	BL	1.2	5.0		ug/L
021424NMW27D	MW-27D	N	SW-846 6010D	Nickel	T	1.8	J	RL	0.88	5.0		ug/L
021424NMW27D	MW-27D	N	SW-846 6010D	Silver	T	1.4	J	RL	0.49	5.0		ug/L
021424NMW27D	MW-27D	N	SW-846 6010D	Zinc	T	8.3	J	RL	3.0	10.0		ug/L
021424NMW27D	MW-27D	N	SW-846 6020B	Cobalt	T	0.45	J	RL	0.050	1.0		ug/L
021424NMW33	MW-33	N	SW-846 6010D	Copper	T		U	BL	3.0	5.0		ug/L
021424NMW33	MW-33	N	SW-846 6010D	Nickel	T	1.3	J	RL	0.88	5.0		ug/L
021424NMW33	MW-33	N	SW-846 6010D	Vanadium	T	2.0	J	RL	1.6	5.0		ug/L
021424NMW33	MW-33	N	SW-846 6020B	Cobalt	T	0.074	J	RL	0.050	1.0		ug/L
021424NMW33	MW-33	N	SW-846 6020B	Lead	T	0.11	J	RL	0.077	1.0		ug/L
021424NMW33	MW-33	N	SW-846 9056A	Fluoride	N	0.079	J	RL	0.050	0.10		mg/L
021424NMW35	MW-35	N	SW-846 6010D	Chromium	T	1.3	J	RL	0.63	5.0		ug/L
021424NMW35	MW-35	N	SW-846 6020B	Cobalt	T	0.45	J	RL	0.050	1.0		ug/L
021424NMW35	MW-35	N	SW-846 9056A	Fluoride	N	0.057	J	RL	0.050	0.10		mg/L
021424NNPFDDUPLICATE	MW-35	FD	SW-846 6010D	Chromium	T	1.4	J	RL	0.63	5.0		ug/L
021424NNPFDDUPLICATE	MW-35	FD	SW-846 6020B	Cobalt	T	0.44	J	RL	0.050	1.0		ug/L
021424NNPFDDUPLICATE	MW-35	FD	SW-846 9056A	Fluoride	N	0.055	J	RL	0.050	0.10		mg/L
021324NMW34	MW-34	N	CALC	Combined Radium	N	0.171	U	S			0.443	pCi/L
021424NMW24	MW-24	N	CALC	Combined Radium	N	2.23	J+	Y			0.425	pCi/L
021424NMW24	MW-24	N	SW-846 9320	RADIUM-228	N	1.37	J+	Y	0.401	0.401	0.251	pCi/L
021424NMW27D	MW-27D	N	CALC	Combined Radium	N	0.884	U	BL,BF,Y,S			0.317	pCi/L

Sample	Location	Sample Type	Method	Analyte	T/D	Result	Qual	Reason Code(s)	MDL	QL	Uncertainty	Unit
021424NMW27D	MW-27D	N	SW-846 9320	RADIUM-228	N	0.715	U	BL,BF,Y	0.715	0.715	0.259	pCi/L
021424NMW33	MW-33	N	CALC	Combined Radium	N	0.729	U	BL,S			0.343	pCi/L
021424NMW33	MW-33	N	SW-846 9315	Radium-226	N	0.346	U	BL	0.346	0.346	0.217	pCi/L
021424NMW35	MW-35	N	CALC	Combined Radium	N	2.38	J+	Y			0.436	pCi/L
021424NMW35	MW-35	N	SW-846 9320	RADIUM-228	N	1.18	J+	Y	0.453	0.453	0.275	pCi/L
021424NNPFDDUPLICATE	MW-35	FD	CALC	Combined Radium	N	2.03	J	BF,Y			0.414	pCi/L
021424NNPFDDUPLICATE	MW-35	FD	SW-846 9320	RADIUM-228	N	0.927	U	BF,Y	0.927	0.927	0.253	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: 92713247

Lab Sample ID	92713247001
Sys Sample Code	021324NMW34
Sample Name	021324NMW34
Sample Date	2/13/2024 3:40:00 PM
Location	BPS-NAP-MW-34 / MW-34
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	0.045	J	RL		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	254				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	40.8				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	1400				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	35300				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	0.90	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		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	7.1				0.50	0.50	2.5	Y	Yes	1	NA
	Manganese	7439-96-5	T	ug/L	4.3				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	0.31	J	H		0.050	0.050	0.050	Y	Yes	2	NA
SW-846 7470A	Mercury	7439-97-6	T	ug/L	0.15	J	RL		0.12	0.12	0.20	Y	Yes	1	NA
SW-846 9056A	Chloride	16887-00-6	N	mg/L	12.7				0.60	0.60	1.0	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L	0.052	J	RL		0.050	0.050	0.10	Y	Yes	1	NA

Lab Sample ID	92713247001
Sys Sample Code	021324NMW34
Sample Name	021324NMW34
Sample Date	2/13/2024 3:40:00 PM
Location	BPS-NAP-MW-34 / MW-34
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	37.4				0.50	0.50	1.0	Y	Yes	1	NA

Facility: Bremo Power Station
SDG: 92713247

Lab Sample ID	92713247002
Sys Sample Code	021424NMW24
Sample Name	021424NMW24
Sample Date	2/14/2024 12:40:00 PM
Location	BPS-NAP-MW-24 / MW-24
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	0.53				0.031	0.031	0.10	Y	Yes	1	NA
SM 2340B	Hardness, Total(SM 2340B)	HARD	N	ug/L	200000				36.8	36.8	662	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	305				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	69.4				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	195				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	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	62400				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	10.1				0.62	0.62	5.0	Y	Yes	1	NA
	Molybdenum	7439-98-7	T	ug/L	4.3	J	RL		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
	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	12.0				3.0	3.0	10.0	Y	Yes	1	NA
SW-846 6020B	Iron	7439-89-6	T	ug/L	5980				105	105	250	Y	Yes	5	NA
	Manganese	7439-96-5	T	ug/L	3130				20.4	20.4	40.0	Y	Yes	20	NA
SW-846 6020B	Cobalt	7440-48-4	T	ug/L	60.4				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	2.7				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	16.8				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	92713247002
Sys Sample Code	021424NMW24
Sample Name	021424NMW24
Sample Date	2/14/2024 12:40:00 PM
Location	BPS-NAP-MW-24 / MW-24
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	36.7				0.50	0.50	1.0	Y	Yes	1	NA

Lab Sample ID	92713247003
Sys Sample Code	021424NMW27D
Sample Name	021424NMW27D
Sample Date	2/14/2024 1:40:00 PM
Location	BPS-NAP-MW-27D / MW-27D
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	292000				36.8	36.8	662	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	666				50.0	50.0	50.0	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	1180				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	22.4				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	67100				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		1.2	1.2	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	1.8	J	RL		0.88	0.88	5.0	Y	Yes	1	NA
	Silver	7440-22-4	T	ug/L	1.4	J	RL		0.49	0.49	5.0	Y	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	8.3	J	RL		3.0	3.0	10.0	Y	Yes	1	NA
SW-846 6020B	Manganese	7439-96-5	T	ug/L	212				2.0	2.0	4.0	Y	Yes	2	NA
SW-846 6020B	Cobalt	7440-48-4	T	ug/L	0.45	J	RL		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	26.5				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	0.025				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	12.3				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	92713247003
Sys Sample Code	021424NMW27D
Sample Name	021424NMW27D
Sample Date	2/14/2024 1:40:00 PM
Location	BPS-NAP-MW-27D / MW-27D
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
SW-846 9056A	Sulfate	14808-79-8	N	mg/L	191				2.0	2.0	4.0	Y	Yes	4	NA

Lab Sample ID	92713247004
Sys Sample Code	021424NMW33
Sample Name	021424NMW33
Sample Date	2/14/2024 12:05:00 PM
Location	BPS-NAP-MW-33 / MW-33
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	250000				36.8	36.8	662	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	329				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	15.7				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	269				4.0	4.0	50.0	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	1.3	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
	Zinc	7440-66-6	T	ug/L	17.4				3.0	3.0	10.0	Y	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	75000				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		3.0	3.0	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	2.0	J	RL		1.6	1.6	5.0	Y	Yes	1	NA
SW-846 6020B	Cobalt	7440-48-4	T	ug/L	0.074	J	RL		0.050	0.050	1.0	Y	Yes	1	NA
	Iron	7439-89-6	T	ug/L	85.7				20.9	20.9	50.0	Y	Yes	1	NA
	Lead	7439-92-1	T	ug/L	0.11	J	RL		0.077	0.077	1.0	Y	Yes	1	NA
	Lithium	7439-93-2	T	ug/L	3.5				0.50	0.50	2.5	Y	Yes	1	NA
	Manganese	7439-96-5	T	ug/L	17.6				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	0.060				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	12.1				0.60	0.60	1.0	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L	0.079	J	RL		0.050	0.050	0.10	Y	Yes	1	NA

Lab Sample ID	92713247004
Sys Sample Code	021424NMW33
Sample Name	021424NMW33
Sample Date	2/14/2024 12:05:00 PM
Location	BPS-NAP-MW-33 / MW-33
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	0.14				0.060	0.060	0.10	Y	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	30.9				0.50	0.50	1.0	Y	Yes	1	NA

Facility: Bremo Power Station
SDG: 92713247

Lab Sample ID	92713247005
Sys Sample Code	021424NMW35
Sample Name	021424NMW35
Sample Date	2/14/2024 12:10:00 PM
Location	BPS-NAP-MW-35 / MW-35
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	181000				36.8	36.8	662	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	285				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	77.2				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	557				4.0	4.0	50.0	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
	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	56200				14.7	14.7	100	Y	Yes	1	NA
	Chromium	7440-47-3	T	ug/L	1.3	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
	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	Manganese	7439-96-5	T	ug/L	726				5.1	5.1	10.0	Y	Yes	5	NA
SW-846 6020B	Cobalt	7440-48-4	T	ug/L	0.45	J	RL		0.050	0.050	1.0	Y	Yes	1	NA
	Iron	7439-89-6	T	ug/L	1710				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	19.8				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	10.1				0.60	0.60	1.0	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L	0.057	J	RL		0.050	0.050	0.10	Y	Yes	1	NA

Lab Sample ID	92713247005
Sys Sample Code	021424NMW35
Sample Name	021424NMW35
Sample Date	2/14/2024 12:10:00 PM
Location	BPS-NAP-MW-35 / MW-35
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	36.0				0.50	0.50	1.0	Y	Yes	1	NA

Lab Sample ID	92713247006
Sys Sample Code	021424NNPFDDUPLICATE
Sample Name	021424NNPFDDUPLICATE
Sample Date	2/14/2024 12:20:00 PM
Location	BPS-NAP-MW-35 / MW-35
Sample Type	FD
Matrix	GW
Parent Sample	021424NMW35

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	187000				36.8	36.8	662	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	288				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	80.3				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	580				4.0	4.0	50.0	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
	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	57800				14.7	14.7	100	Y	Yes	1	NA
	Chromium	7440-47-3	T	ug/L	1.4	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
	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	Manganese	7439-96-5	T	ug/L	705				5.1	5.1	10.0	Y	Yes	5	NA
SW-846 6020B	Cobalt	7440-48-4	T	ug/L	0.44	J	RL		0.050	0.050	1.0	Y	Yes	1	NA
	Iron	7439-89-6	T	ug/L	1550				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	18.8				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	10.1				0.60	0.60	1.0	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L	0.055	J	RL		0.050	0.050	0.10	Y	Yes	1	NA

Lab Sample ID	92713247006
Sys Sample Code	021424NNPFDDUPLICATE
Sample Name	021424NNPFDDUPLICATE
Sample Date	2/14/2024 12:20:00 PM
Location	BPS-NAP-MW-35 / MW-35
Sample Type	FD
Matrix	GW
Parent Sample	021424NMW35

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	36.0				0.50	0.50	1.0	Y	Yes	1	NA

Lab Sample ID	L1706881-01
Sys Sample Code	021324NMW34
Sample Name	021324NMW34
Sample Date	2/13/2024 3:40:00 PM
Location	BPS-NAP-MW-34 / MW-34
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	0.171	U	S	0.443				N	Y	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	0.171	U		0.178	0.207	0.207	0.207	N	Y	1	NA
SW-846 9320	RADIUM-228	15262-20-1	N	pCi/L	-0.521	U		0.406	0.728	0.728	0.728	N	Y	1	NA

Facility: Bremo Power Station
SDG: 92713247

Lab Sample ID	L1706881-02
Sys Sample Code	021424NMW24
Sample Name	021424NMW24
Sample Date	2/14/2024 12:40:00 PM
Location	BPS-NAP-MW-24 / MW-24
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	2.23	J+	Y	0.425				Y	Y	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	0.858			0.343	0.286	0.286	0.286	Y	Y	1	NA
SW-846 9320	RADIUM-228	15262-20-1	N	pCi/L	1.37	J+	Y	0.251	0.401	0.401	0.401	Y	Y	1	NA

Lab Sample ID	L1706881-03
Sys Sample Code	021424NMW27D
Sample Name	021424NMW27D
Sample Date	2/14/2024 1:40:00 PM
Location	BPS-NAP-MW-27D / MW-27D
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	0.884	U	BL,BF,Y,S	0.317				N	Y	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	0.169	U		0.183	0.274	0.274	0.274	N	Y	1	NA
SW-846 9320	RADIUM-228	15262-20-1	N	pCi/L	0.715	U	BL,BF,Y	0.259	0.715	0.715	0.715	N	Y	1	NA

Lab Sample ID	L1706881-04
Sys Sample Code	021424NMW33
Sample Name	021424NMW33
Sample Date	2/14/2024 12:05:00 PM
Location	BPS-NAP-MW-33 / MW-33
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	0.729	U	BL,S	0.343				N	Y	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	0.346	U	BL	0.217	0.346	0.346	0.346	N	Y	1	NA
SW-846 9320	RADIUM-228	15262-20-1	N	pCi/L	0.383	U		0.266	0.460	0.460	0.460	N	Y	1	NA

Lab Sample ID	L1706881-05
Sys Sample Code	021424NMW35
Sample Name	021424NMW35
Sample Date	2/14/2024 12:10:00 PM
Location	BPS-NAP-MW-35 / MW-35
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	2.38	J+	Y	0.436				Y	Y	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	1.20			0.338	0.200	0.200	0.200	Y	Y	1	NA
SW-846 9320	RADIUM-228	15262-20-1	N	pCi/L	1.18	J+	Y	0.275	0.453	0.453	0.453	Y	Y	1	NA

Facility: Bremo Power Station
SDG: 92713247

Lab Sample ID	L1706881-06
Sys Sample Code	021424NNPFDDUPLICATE
Sample Name	021424NNPFDDUPLICATE
Sample Date	2/14/2024 12:20:00 PM
Location	BPS-NAP-MW-35 / MW-35
Sample Type	FD
Matrix	GW
Parent Sample	021424NMW35

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	2.03	J	BF,Y	0.414				Y	Y	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	1.10			0.328	0.203	0.203	0.203	Y	Y	1	NA
SW-846 9320	RADIUM-228	15262-20-1	N	pCi/L	0.927	U	BF,Y	0.253	0.927	0.927	0.927	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:

92713248

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
021324NMW25S	MW-25S	N	SW-846 6010D	Boron	T		U	BF	19.0	50.0		ug/L
021324NMW25S	MW-25S	N	SW-846 6010D	Copper	T	1.7	J	RL	0.62	5.0		ug/L
021324NMW25S	MW-25S	N	SW-846 6010D	Nickel	T	2.0	J	RL	0.88	5.0		ug/L
021324NMW25S	MW-25S	N	SW-846 6010D	Silver	T	4.2	J	RL	0.49	5.0		ug/L
021324NMW25S	MW-25S	N	SW-846 6010D	Zinc	T	4.9	J	RL	3.0	10.0		ug/L
021324NMW25S	MW-25S	N	SW-846 6020B	Lead	T	0.18	J	RL	0.077	1.0		ug/L
021324NMW25S	MW-25S	N	SW-846 6020B	Lithium	T	0.92	J	RL	0.50	2.5		ug/L
021324NMW25S	MW-25S	N	SW-846 6020B	Tin	T	0.74	J	RL	0.43	1.0		ug/L
021324NMW25S	MW-25S	N	SW-846 9056A	Nitrate as N	N	0.071	J	RL	0.060	0.10		mg/L
021324NMW25D	MW-25D	N	SW-846 6010D	Arsenic	T	2.5	J	RL	2.5	10.0		ug/L
021324NMW25D	MW-25D	N	SW-846 6010D	Boron	T		U	BF	21.4	50.0		ug/L
021324NMW25D	MW-25D	N	SW-846 6010D	Chromium	T	3.0	J	RL	0.63	5.0		ug/L
021324NMW25D	MW-25D	N	SW-846 6010D	Copper	T	3.7	J	RL	0.62	5.0		ug/L
021324NMW25D	MW-25D	N	SW-846 6010D	Nickel	T	2.9	J	RL	0.88	5.0		ug/L
021324NMW25D	MW-25D	N	SW-846 6010D	Zinc	T	5.6	J	RL	3.0	10.0		ug/L
021324NMW26S	MW-26S	N	SW-846 6010D	Chromium	T	0.66	J	RL	0.63	5.0		ug/L
021324NMW26S	MW-26S	N	SW-846 6010D	Nickel	T	0.93	J	RL	0.88	5.0		ug/L
021324NMW26S	MW-26S	N	SW-846 6020B	Iron	T	48.3	J	RL	20.9	50.0		ug/L
021324NMW26S	MW-26S	N	SW-846 6020B	Lithium	T	0.88	J	RL	0.50	2.5		ug/L
021324NMW26S	MW-26S	N	SW-846 7199	Chromium, Hexavalent	D	0.22	J	H	0.025	0.025		ug/L
021324NMW26S	MW-26S	N	SW-846 9056A	Nitrate as N	N	0.061	J	RL	0.060	0.10		mg/L
021324NMW26D	MW-26D	N	SW-846 6010D	Boron	T		U	BF	5.7	50.0		ug/L
021324NMW26D	MW-26D	N	SW-846 6010D	Copper	T	1.0	J	RL	0.62	5.0		ug/L
021324NMW26D	MW-26D	N	SW-846 6010D	Molybdenum	T	4.0	J	RL	2.6	5.0		ug/L
021324NMW26D	MW-26D	N	SW-846 6010D	Nickel	T	1.2	J	RL	0.88	5.0		ug/L
021324NMW26D	MW-26D	N	SW-846 6010D	Silver	T	0.52	J	RL	0.49	5.0		ug/L
021324NMW26D	MW-26D	N	SW-846 7199	Chromium, Hexavalent	D		UJ	H	0.025	0.025		ug/L
021324NMW27S	MW-27S	N	SW-846 6010D	Copper	T	1.4	J	RL	0.62	5.0		ug/L
021324NMW27S	MW-27S	N	SW-846 6010D	Nickel	T	2.2	J	RL	0.88	5.0		ug/L
021324NMW27S	MW-27S	N	SW-846 6010D	Silver	T	0.95	J	RL	0.49	5.0		ug/L

Sample	Location	Sample Type	Method	Analyte	T/D	Result	Qual	Reason Code(s)	MDL	QL	Uncertainty	Unit
021324NMW27S	MW-27S	N	SW-846 6010D	Vanadium	T	3.3	J	RL	1.6	5.0		ug/L
021324NMW27S	MW-27S	N	SW-846 6020B	Cobalt	T	0.18	J	RL	0.050	1.0		ug/L
021324NMW27S	MW-27S	N	SW-846 7199	Chromium, Hexavalent	D		UJ	H	0.025	0.025		ug/L
021324NMW27S	MW-27S	N	SW-846 9056A	Fluoride	N	0.054	J	RL	0.050	0.10		mg/L
021424NMW28	MW-28	N	SW-846 6010D	Chromium	T	1.4	J	RL	0.63	5.0		ug/L
021424NMW28	MW-28	N	SW-846 6010D	Copper	T		U	BL	0.75	5.0		ug/L
021424NMW28	MW-28	N	SW-846 6010D	Vanadium	T	2.0	J	RL	1.6	5.0		ug/L
021424NMW28	MW-28	N	SW-846 6020B	Cobalt	T	0.14	J	RL	0.050	1.0		ug/L
021424NMW28	MW-28	N	SW-846 6020B	Lead	T	0.20	J	RL	0.077	1.0		ug/L
021424NMW28	MW-28	N	SW-846 6020B	Lithium	T	1.4	J	RL	0.50	2.5		ug/L
021324NMW25S	MW-25S	N	CALC	Combined Radium	N	0.938	U	BL,BF,Y			0.279	pCi/L
021324NMW25S	MW-25S	N	SW-846 9315	Radium-226	N	0.275	U	BL	0.275	0.275	0.201	pCi/L
021324NMW25S	MW-25S	N	SW-846 9320	RADIUM-228	N	0.663	U	BL,BF,Y	0.663	0.663	0.194	pCi/L
021324NMW25D	MW-25D	N	CALC	Combined Radium	N	2.12	J	BL,BF,Y			0.471	pCi/L
021324NMW25D	MW-25D	N	SW-846 9320	RADIUM-228	N	0.719	U	BL,BF,Y	0.719	0.719	0.282	pCi/L
021324NMW26S	MW-26S	N	CALC	Combined Radium	N	0.379	U	BL,S			0.262	pCi/L
021324NMW26S	MW-26S	N	SW-846 9315	Radium-226	N	0.276	U	BL	0.276	0.276	0.180	pCi/L
021324NMW26D	MW-26D	N	CALC	Combined Radium	N	0.538	J	S			0.335	pCi/L
021324NMW27S	MW-27S	N	CALC	Combined Radium	N	0.932	J	BL,BF,Y			0.293	pCi/L
021324NMW27S	MW-27S	N	SW-846 9320	RADIUM-228	N	0.667	U	BL,BF,Y	0.667	0.667	0.207	pCi/L
021424NMW28	MW-28	N	CALC	Combined Radium	N	0.614	J	S			0.312	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: 92713248

Lab Sample ID	92713248001
Sys Sample Code	021324NMW25S
Sample Name	021324NMW25S
Sample Date	2/13/2024 1:20:00 PM
Location	BPS-NAP-MW-25S / MW-25S
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	142000				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	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	18.1				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		19.0	19.0	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	39800				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	1.7	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	2.0	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	4.2	J	RL		0.49	0.49	5.0	Y	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	4.9	J	RL		3.0	3.0	10.0	Y	Yes	1	NA
SW-846 6020B	Cobalt	7440-48-4	T	ug/L	4.0				0.050	0.050	1.0	Y	Yes	1	NA
	Iron	7439-89-6	T	ug/L	1120				20.9	20.9	50.0	Y	Yes	1	NA
	Lead	7439-92-1	T	ug/L	0.18	J	RL		0.077	0.077	1.0	Y	Yes	1	NA
	Lithium	7439-93-2	T	ug/L	0.92	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	0.74	J	RL		0.43	0.43	1.0	Y	Yes	1	NA
SW-846 6020B	Manganese	7439-96-5	T	ug/L	332				3.1	3.1	6.0	Y	Yes	3	NA
SW-846 7199	Chromium, Hexavalent	18540-29-9	D	ug/L	0.032				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	8.5				0.60	0.60	1.0	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L	0.19				0.050	0.050	0.10	Y	Yes	1	NA

Lab Sample ID	92713248001
Sys Sample Code	021324NMW25S
Sample Name	021324NMW25S
Sample Date	2/13/2024 1:20:00 PM
Location	BPS-NAP-MW-25S / MW-25S
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	0.071	J	RL		0.060	0.060	0.10	Y	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	14.5				0.50	0.50	1.0	Y	Yes	1	NA

Lab Sample ID	92713248002
Sys Sample Code	021324NMW25D
Sample Name	021324NMW25D
Sample Date	2/13/2024 2:10:00 PM
Location	BPS-NAP-MW-25D / MW-25D
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	90100				36.8	36.8	662	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	178				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	2.5	J	RL		2.5	2.5	10.0	Y	Yes	1	NA
	Barium	7440-39-3	T	ug/L	31.9				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		21.4	21.4	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	27900				14.7	14.7	100	Y	Yes	1	NA
	Chromium	7440-47-3	T	ug/L	3.0	J	RL		0.63	0.63	5.0	Y	Yes	1	NA
	Copper	7440-50-8	T	ug/L	3.7	J	RL		0.62	0.62	5.0	Y	Yes	1	NA
	Molybdenum	7439-98-7	T	ug/L	23.1				2.6	2.6	5.0	Y	Yes	1	NA
	Nickel	7440-02-0	T	ug/L	2.9	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	5.8				0.49	0.49	5.0	Y	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	5.6	J	RL		3.0	3.0	10.0	Y	Yes	1	NA
SW-846 6020B	Cobalt	7440-48-4	T	ug/L	1.1				0.050	0.050	1.0	Y	Yes	1	NA
	Iron	7439-89-6	T	ug/L	1210				20.9	20.9	50.0	Y	Yes	1	NA
	Lead	7439-92-1	T	ug/L	1.3				0.077	0.077	1.0	Y	Yes	1	NA
	Lithium	7439-93-2	T	ug/L	3.0				0.50	0.50	2.5	Y	Yes	1	NA
	Manganese	7439-96-5	T	ug/L	159				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		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	8.8				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	92713248002
Sys Sample Code	021324NMW25D
Sample Name	021324NMW25D
Sample Date	2/13/2024 2:10:00 PM
Location	BPS-NAP-MW-25D / MW-25D
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	19.7				0.50	0.50	1.0	Y	Yes	1	NA

Lab Sample ID	92713248003
Sys Sample Code	021324NMW26S
Sample Name	021324NMW26S
Sample Date	2/13/2024 3:35:00 PM
Location	BPS-NAP-MW-26S / MW-26S
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	27700				36.8	36.8	662	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	105				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	20.7				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			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	8520				14.7	14.7	100	Y	Yes	1	NA
	Chromium	7440-47-3	T	ug/L	0.66	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	0.93	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		U			0.050	0.050	1.0	N	Yes	1	NA
	Iron	7439-89-6	T	ug/L	48.3	J	RL		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	0.88	J	RL		0.50	0.50	2.5	Y	Yes	1	NA
	Manganese	7439-96-5	T	ug/L	5.0				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	0.22	J	H		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	2.7				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	92713248003
Sys Sample Code	021324NMW26S
Sample Name	021324NMW26S
Sample Date	2/13/2024 3:35:00 PM
Location	BPS-NAP-MW-26S / MW-26S
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	2.6				0.50	0.50	1.0	Y	Yes	1	NA

Lab Sample ID	92713248004
Sys Sample Code	021324NMW26D
Sample Name	021324NMW26D
Sample Date	2/13/2024 2:55:00 PM
Location	BPS-NAP-MW-26D / MW-26D
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	284				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	198				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		5.7	5.7	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	44200				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	1.0	J	RL		0.62	0.62	5.0	Y	Yes	1	NA
	Molybdenum	7439-98-7	T	ug/L	4.0	J	RL		2.6	2.6	5.0	Y	Yes	1	NA
	Nickel	7440-02-0	T	ug/L	1.2	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	0.52	J	RL		0.49	0.49	5.0	Y	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	1.1				0.050	0.050	1.0	Y	Yes	1	NA
	Iron	7439-89-6	T	ug/L	2720				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	5.0				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	1180				10.2	10.2	20.0	Y	Yes	10	NA
SW-846 7199	Chromium, Hexavalent	18540-29-9	D	ug/L		UJ	H		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	10.6				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	92713248004
Sys Sample Code	021324NMW26D
Sample Name	021324NMW26D
Sample Date	2/13/2024 2:55:00 PM
Location	BPS-NAP-MW-26D / MW-26D
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	48.5				0.50	0.50	1.0	Y	Yes	1	NA

Lab Sample ID	92713248005
Sys Sample Code	021324NMW27S
Sample Name	021324NMW27S
Sample Date	2/13/2024 2:50:00 PM
Location	BPS-NAP-MW-27S / MW-27S
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	536000				368	368	6620	Y	Yes	10	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	670				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	85.6				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	1500				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
	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	2.2	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	0.95	J	RL		0.49	0.49	5.0	Y	Yes	1	NA
	Vanadium	7440-62-2	T	ug/L	3.3	J	RL		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 6010D	Calcium	7440-70-2	T	ug/L	122000				147	147	1000	Y	Yes	10	NA
SW-846 6020B	Cobalt	7440-48-4	T	ug/L	0.18	J	RL		0.050	0.050	1.0	Y	Yes	1	NA
	Iron	7439-89-6	T	ug/L	124				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	5.9				0.50	0.50	2.5	Y	Yes	1	NA
	Manganese	7439-96-5	T	ug/L	21.6				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		UJ	H		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	11.2				0.60	0.60	1.0	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L	0.054	J	RL		0.050	0.050	0.10	Y	Yes	1	NA

Lab Sample ID	92713248005
Sys Sample Code	021324NMW27S
Sample Name	021324NMW27S
Sample Date	2/13/2024 2:50:00 PM
Location	BPS-NAP-MW-27S / MW-27S
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
SW-846 9056A	Sulfate	14808-79-8	N	mg/L	153				1.5	1.5	3.0	Y	Yes	3	NA

Lab Sample ID	92713248006
Sys Sample Code	021424NMW28
Sample Name	021424NMW28
Sample Date	2/14/2024 2:05:00 PM
Location	BPS-NAP-MW-28 / MW-28
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	224000				36.8	36.8	662	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	343				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	42.6				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	231				4.0	4.0	50.0	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	11.3				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	54900				14.7	14.7	100	Y	Yes	1	NA
	Chromium	7440-47-3	T	ug/L	1.4	J	RL		0.63	0.63	5.0	Y	Yes	1	NA
	Copper	7440-50-8	T	ug/L		U	BL		0.75	0.75	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	2.0	J	RL		1.6	1.6	5.0	Y	Yes	1	NA
SW-846 6020B	Cobalt	7440-48-4	T	ug/L	0.14	J	RL		0.050	0.050	1.0	Y	Yes	1	NA
	Iron	7439-89-6	T	ug/L	368				20.9	20.9	50.0	Y	Yes	1	NA
	Lead	7439-92-1	T	ug/L	0.20	J	RL		0.077	0.077	1.0	Y	Yes	1	NA
	Lithium	7439-93-2	T	ug/L	1.4	J	RL		0.50	0.50	2.5	Y	Yes	1	NA
	Manganese	7439-96-5	T	ug/L	14.0				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	0.73				0.12	0.12	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	9.1				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	92713248006
Sys Sample Code	021424NMW28
Sample Name	021424NMW28
Sample Date	2/14/2024 2:05:00 PM
Location	BPS-NAP-MW-28 / MW-28
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	0.27				0.060	0.060	0.10	Y	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	97.3				0.50	0.50	1.0	Y	Yes	1	NA

Lab Sample ID	L1706887-01
Sys Sample Code	021324NMW25S
Sample Name	021324NMW25S
Sample Date	2/13/2024 1:20:00 PM
Location	BPS-NAP-MW-25S / MW-25S
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	0.938	U	BL,BF,Y	0.279				N	Y	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	0.275	U	BL	0.201	0.275	0.275	0.275	N	Y	1	NA
SW-846 9320	RADIUM-228	15262-20-1	N	pCi/L	0.663	U	BL,BF,Y	0.194	0.663	0.663	0.663	N	Y	1	NA

Lab Sample ID	L1706887-02
Sys Sample Code	021324NMW25D
Sample Name	021324NMW25D
Sample Date	2/13/2024 2:10:00 PM
Location	BPS-NAP-MW-25D / MW-25D
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	2.12	J	BL,BF,Y	0.471				Y	Y	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	1.40			0.377	0.267	0.267	0.267	Y	Y	1	NA
SW-846 9320	RADIUM-228	15262-20-1	N	pCi/L	0.719	U	BL,BF,Y	0.282	0.719	0.719	0.719	N	Y	1	NA

Lab Sample ID	L1706887-03
Sys Sample Code	021324NMW26S
Sample Name	021324NMW26S
Sample Date	2/13/2024 3:35:00 PM
Location	BPS-NAP-MW-26S / MW-26S
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	0.379	U	BL,S	0.262				N	Y	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	0.276	U	BL	0.180	0.276	0.276	0.276	N	Y	1	NA
SW-846 9320	RADIUM-228	15262-20-1	N	pCi/L	0.103	U		0.190	0.343	0.343	0.343	N	Y	1	NA

Facility: Bremo Power Station
SDG: 92713248

Lab Sample ID	L1706887-04
Sys Sample Code	021324NMW26D
Sample Name	021324NMW26D
Sample Date	2/13/2024 2:55:00 PM
Location	BPS-NAP-MW-26D / MW-26D
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	0.538	J	S	0.335				Y	Y	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	0.241			0.186	0.189	0.189	0.189	Y	Y	1	NA
SW-846 9320	RADIUM-228	15262-20-1	N	pCi/L	0.297	U		0.279	0.493	0.493	0.493	N	Y	1	NA

Lab Sample ID	L1706887-05
Sys Sample Code	021324NMW27S
Sample Name	021324NMW27S
Sample Date	2/13/2024 2:50:00 PM
Location	BPS-NAP-MW-27S / MW-27S
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	0.932	J	BL,BF,Y	0.293				Y	Y	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	0.265			0.208	0.241	0.241	0.241	Y	Y	1	NA
SW-846 9320	RADIUM-228	15262-20-1	N	pCi/L	0.667	U	BL,BF,Y	0.207	0.667	0.667	0.667	N	Y	1	NA

Facility: Bremo Power Station
SDG: 92713248

Lab Sample ID	L1706887-06
Sys Sample Code	021424NMW28
Sample Name	021424NMW28
Sample Date	2/14/2024 2:05:00 PM
Location	BPS-NAP-MW-28 / MW-28
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	0.614	J	S	0.312				Y	Y	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	0.287			0.207	0.198	0.198	0.198	Y	Y	1	NA
SW-846 9320	RADIUM-228	15262-20-1	N	pCi/L	0.328	U		0.233	0.411	0.411	0.411	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

APPENDIX G.2
DATA VALIDATION FORMS
FIRST SEMI-ANNUAL
VERIFICATION SAMPLING EVENT
(APRIL 2024)

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: 4/11/2024

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:

92725173

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
041124NMW24	MW-24	N	SW-846 6010D	Zinc	T		U	BL	3.2	10.0		ug/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: 92725173

Lab Sample ID	92725173001
Sys Sample Code	041124NMW24
Sample Name	041124NMW24
Sample Date	4/11/2024 10:50:00 AM
Location	BPS-NAP-MW-24 / MW-24
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 6010D	Zinc	7440-66-6	T	ug/L		U	BL		3.2	3.2	10.0	N	Yes	1	NA

Lab Sample ID	92725173002
Sys Sample Code	041124NMW25D
Sample Name	041124NMW25D
Sample Date	4/11/2024 1:15:00 PM
Location	BPS-NAP-MW-25D / MW-25D
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 6010D	Silver	7440-22-4	T	ug/L		U			0.49	0.49	5.0	N	Yes	1	NA

Facility: Bremo Power Station
SDG: 92725173

Lab Sample ID	92725173003
Sys Sample Code	041124NFBBLANK
Sample Name	041124NFBBLANK
Sample Date	4/11/2024 1:20:00 PM
Location	BPS-NAP-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 6010D	Silver	7440-22-4	T	ug/L		U			0.49	0.49	5.0	N	Yes	1	NA
	Zinc	7440-66-6	T	ug/L		U			3.0	3.0	10.0	N	Yes	1	NA

APPENDIX G.3

DATA VALIDATION FORMS

SECOND SEMI-ANNUAL GROUNDWATER MONITORING EVENT

(AUGUST 2024)

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.
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BF	Field blank contamination.
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BN	Negative laboratory blank contamination.
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FG	Total versus Dissolved Imprecision.
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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

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:

92750043

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
082724NMW24	MW-24	N	SW-846 6010D	Copper	T	0.65	J	RL	0.62	5.0		ug/L
082724NMW24	MW-24	N	SW-846 7199	Chromium, Hexavalent	D		UJ	H	0.0043	0.025		ug/L
082724NMW27D	MW-27D	N	SW-846 6010D	Nickel	T	1.7	J	RL	0.88	5.0		ug/L
082724NMW27D	MW-27D	N	SW-846 6010D	Silver	T	0.74	J	RL	0.49	5.0		ug/L
082724NMW27D	MW-27D	N	SW-846 6010D	Zinc	T	5.2	J	RL	3.0	10.0		ug/L
082724NMW27D	MW-27D	N	SW-846 7199	Chromium, Hexavalent	D	0.23	J	H	0.0086	0.050		ug/L
082724NMW27D	MW-27D	N	SW-846 9056A	Nitrate as N	N	0.083	J	RL	0.060	0.10		mg/L
082724NMW33	MW-33	N	SW-846 6010D	Copper	T	1.4	J	RL	0.62	5.0		ug/L
082724NMW33	MW-33	N	SW-846 6010D	Nickel	T	1.0	J	RL	0.88	5.0		ug/L
082724NMW33	MW-33	N	SW-846 6010D	Vanadium	T	2.3	J	RL	1.6	5.0		ug/L
082724NMW33	MW-33	N	SW-846 6020B	Tin	T	0.25	J	RL	0.14	1.0		ug/L
082724NMW33	MW-33	N	SW-846 7199	Chromium, Hexavalent	D		U	BF,H	0.087	0.087		ug/L
082724NMW33	MW-33	N	SW-846 9056A	Fluoride	N	0.065	J	RL	0.050	0.10		mg/L
082724NMW34	MW-34	N	SW-846 6010D	Chromium	T	0.76	J	RL	0.63	5.0		ug/L
082724NMW34	MW-34	N	SW-846 6010D	Silver	T	0.51	J	RL	0.49	5.0		ug/L
082724NMW34	MW-34	N	SW-846 6020B	Iron	T	15.5	J	RL	3.0	20.0		ug/L
082724NMW34	MW-34	N	SW-846 7199	Chromium, Hexavalent	D	0.48	J	H	0.0086	0.050		ug/L
082724NMW34	MW-34	N	SW-846 7470A	Mercury	T	0.17	J	RL	0.12	0.20		ug/L
082724NMW35	MW-35	N	SW-846 6010D	Arsenic	T	2.5	J	RL	2.5	10.0		ug/L
082724NMW35	MW-35	N	SW-846 6010D	Chromium	T	1.8	J	RL	0.63	5.0		ug/L
082724NMW35	MW-35	N	SW-846 6020B	Cobalt	T	0.44	J	RL	0.14	1.0		ug/L
082724NMW35	MW-35	N	SW-846 7199	Chromium, Hexavalent	D		UJ	H	0.0043	0.025		ug/L
082724NNPFDDUPLICATE	MW-24	FD	SW-846 7199	Chromium, Hexavalent	D		UJ	H	0.0043	0.025		ug/L
082724NMW24	MW-24	N	CALC	Combined Radium	N	1.64	J	Y,FD			0.385	pCi/L
082724NMW24	MW-24	N	SW-846 9315	Radium-226	N	0.393	J	FD	0.235	0.235	0.215	pCi/L
082724NMW24	MW-24	N	SW-846 9320	RADIUM-228	N	1.25	J+	Y	0.556	0.556	0.319	pCi/L
082724NMW27D	MW-27D	N	CALC	Combined Radium	N	1.53	J+	Y			0.538	pCi/L
082724NMW27D	MW-27D	N	SW-846 9320	RADIUM-228	N	1.24	J+	Y	0.907	0.907	0.508	pCi/L
082724NMW34	MW-34	N	CALC	Combined Radium	N	0.216	U	S			0.296	pCi/L
082724NMW35	MW-35	N	CALC	Combined Radium	N	1.19	J	S			0.400	pCi/L

Sample	Location	Sample Type	Method	Analyte	T/D	Result	Qual	Reason Code(s)	MDL	QL	Uncertainty	Unit
082724NNPFDDUPLICATE	MW-24	FD	CALC	Combined Radium	N	2.17	J	Y,FD			0.427	pCi/L
082724NNPFDDUPLICATE	MW-24	FD	SW-846 9315	Radium-226	N	1.06	J	FD	0.184	0.184	0.320	pCi/L
082724NNPFDDUPLICATE	MW-24	FD	SW-846 9320	RADIUM-228	N	1.11	J+	Y	0.493	0.493	0.283	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: 92750043

Lab Sample ID	92750043001
Sys Sample Code	082724NMW24
Sample Name	082724NMW24
Sample Date	8/27/2024 12:25:00 PM
Location	BPS-NAP-MW-24 / MW-24
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	0.46				0.031	0.031	0.10	Y	Yes	1	NA
SM 2340B	Hardness, Total(SM 2340B)	HARD	N	ug/L	220000				36.8	36.8	662	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	347				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	75.1				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	209				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	70300				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	0.65	J	RL		0.62	0.62	5.0	Y	Yes	1	NA
	Molybdenum	7439-98-7	T	ug/L	6.5				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	47.3				0.14	0.14	1.0	Y	Yes	1	NA
	Iron	7439-89-6	T	ug/L	6090				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	2.7				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	3210				7.1	7.1	60.0	Y	Yes	30	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	18.7				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	92750043001
Sys Sample Code	082724NMW24
Sample Name	082724NMW24
Sample Date	8/27/2024 12:25:00 PM
Location	BPS-NAP-MW-24 / MW-24
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	39.5				0.50	0.50	1.0	Y	Yes	1	NA

Facility: Bremo Power Station
SDG: 92750043

Lab Sample ID	92750043002
Sys Sample Code	082724NMW27D
Sample Name	082724NMW27D
Sample Date	8/27/2024 1:50:00 PM
Location	BPS-NAP-MW-27D / MW-27D
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	286000				36.8	36.8	662	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	694				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	18.1				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	1350				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	65000				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	1.7	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	0.74	J	RL		0.49	0.49	5.0	Y	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	5.2	J	RL		3.0	3.0	10.0	Y	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	261				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	30.0				0.33	0.33	2.5	Y	Yes	1	NA
	Manganese	7439-96-5	T	ug/L	62.5				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	0.23	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	Sulfate	14808-79-8	N	mg/L	186				2.0	2.0	4.0	Y	Yes	4	NA
SW-846 9056A	Chloride	16887-00-6	N	mg/L	11.7				0.60	0.60	1.0	Y	Yes	1	NA

Lab Sample ID	92750043002
Sys Sample Code	082724NMW27D
Sample Name	082724NMW27D
Sample Date	8/27/2024 1:50:00 PM
Location	BPS-NAP-MW-27D / MW-27D
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	0.10				0.050	0.050	0.10	Y	Yes	1	NA
	Nitrate as N	14797-55-8	N	mg/L	0.083	J	RL		0.060	0.060	0.10	Y	Yes	1	NA

Lab Sample ID	92750043003
Sys Sample Code	082724NMW33
Sample Name	082724NMW33
Sample Date	8/27/2024 3:10:00 PM
Location	BPS-NAP-MW-33 / MW-33
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	256000				36.8	36.8	662	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	328				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	16.4				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	273				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	78200				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	1.0	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	2.3	J	RL		1.6	1.6	5.0	Y	Yes	1	NA
	Zinc	7440-66-6	T	ug/L	18.9				3.0	3.0	10.0	Y	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	51.8				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	3.8				0.33	0.33	2.5	Y	Yes	1	NA
	Manganese	7439-96-5	T	ug/L	12.0				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	0.25	J	RL		0.14	0.14	1.0	Y	Yes	1	NA
SW-846 7199	Chromium, Hexavalent	18540-29-9	D	ug/L		U	BF,H		0.087	0.087	0.087	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	0.065	J	RL		0.050	0.050	0.10	Y	Yes	1	NA

Lab Sample ID	92750043003
Sys Sample Code	082724NMW33
Sample Name	082724NMW33
Sample Date	8/27/2024 3:10:00 PM
Location	BPS-NAP-MW-33 / MW-33
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	0.15				0.060	0.060	0.10	Y	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	31.7				0.50	0.50	1.0	Y	Yes	1	NA

Lab Sample ID	92750043004
Sys Sample Code	082724NMW34
Sample Name	082724NMW34
Sample Date	8/27/2024 4:25:00 PM
Location	BPS-NAP-MW-34 / MW-34
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	150000				36.8	36.8	662	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	263				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	42.0				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	1380				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	38200				14.7	14.7	100	Y	Yes	1	NA
	Chromium	7440-47-3	T	ug/L	0.76	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	0.51	J	RL		0.49	0.49	5.0	Y	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	15.5	J	RL		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	7.2				0.33	0.33	2.5	Y	Yes	1	NA
	Manganese	7439-96-5	T	ug/L	4.5				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	0.48	J	H		0.0086	0.0086	0.050	Y	Yes	2	NA
SW-846 7470A	Mercury	7439-97-6	T	ug/L	0.17	J	RL		0.12	0.12	0.20	Y	Yes	1	NA
SW-846 9056A	Chloride	16887-00-6	N	mg/L	12.6				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	92750043004
Sys Sample Code	082724NMW34
Sample Name	082724NMW34
Sample Date	8/27/2024 4:25:00 PM
Location	BPS-NAP-MW-34 / MW-34
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	35.9				0.50	0.50	1.0	Y	Yes	1	NA

Lab Sample ID	92750043005
Sys Sample Code	082724NMW35
Sample Name	082724NMW35
Sample Date	8/27/2024 12:35:00 PM
Location	BPS-NAP-MW-35 / MW-35
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	177000				36.8	36.8	662	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	295				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	2.5	J	RL		2.5	2.5	10.0	Y	Yes	1	NA
	Barium	7440-39-3	T	ug/L	80.6				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	615				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	54100				14.7	14.7	100	Y	Yes	1	NA
	Chromium	7440-47-3	T	ug/L	1.8	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	Manganese	7439-96-5	T	ug/L	652				1.2	1.2	10.0	Y	Yes	5	NA
SW-846 6020B	Cobalt	7440-48-4	T	ug/L	0.44	J	RL		0.14	0.14	1.0	Y	Yes	1	NA
	Iron	7439-89-6	T	ug/L	2240				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	18.3				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	9.9				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	92750043005
Sys Sample Code	082724NMW35
Sample Name	082724NMW35
Sample Date	8/27/2024 12:35:00 PM
Location	BPS-NAP-MW-35 / MW-35
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	35.1				0.50	0.50	1.0	Y	Yes	1	NA

Facility: Bremo Power Station
SDG: 92750043

Lab Sample ID	92750043006
Sys Sample Code	082724NNPFDDUPLICATE
Sample Name	082724NNPFDDUPLICATE
Sample Date	8/27/2024 12:30:00 PM
Location	BPS-NAP-MW-24 / MW-24
Sample Type	FD
Matrix	GW
Parent Sample	082724NMW24

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	0.47				0.031	0.031	0.10	Y	Yes	1	NA
SM 2340B	Hardness, Total(SM 2340B)	HARD	N	ug/L	223000				36.8	36.8	662	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	347				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	74.0				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	229				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	69700				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	7.6				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	Manganese	7439-96-5	T	ug/L	3230				7.1	7.1	60.0	Y	Yes	30	NA
SW-846 6020B	Cobalt	7440-48-4	T	ug/L	50.0				0.14	0.14	1.0	Y	Yes	1	NA
	Iron	7439-89-6	T	ug/L	6170				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	2.7				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 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	18.4				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	92750043006
Sys Sample Code	082724NNPFDDUPLICATE
Sample Name	082724NNPFDDUPLICATE
Sample Date	8/27/2024 12:30:00 PM
Location	BPS-NAP-MW-24 / MW-24
Sample Type	FD
Matrix	GW
Parent Sample	082724NMW24

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	39.2				0.50	0.50	1.0	Y	Yes	1	NA

Facility: Bremo Power Station
SDG: 92750043

Lab Sample ID	L1773890-01
Sys Sample Code	082724NMW24
Sample Name	082724NMW24
Sample Date	8/27/2024 12:25:00 PM
Location	BPS-NAP-MW-24 / MW-24
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	1.64	J	Y,FD	0.385				Y	Y	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	0.393	J	FD	0.215	0.235	0.235	0.235	Y	Y	1	NA
SW-846 9320	RADIUM-228	15262-20-1	N	pCi/L	1.25	J+	Y	0.319	0.556	0.556	0.556	Y	Y	1	NA

Lab Sample ID	L1773890-02
Sys Sample Code	082724NMW27D
Sample Name	082724NMW27D
Sample Date	8/27/2024 1:50:00 PM
Location	BPS-NAP-MW-27D / MW-27D
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	1.53	J+	Y	0.538				Y	Y	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	0.290			0.177	0.185	0.185	0.185	Y	Y	1	NA
SW-846 9320	RADIUM-228	15262-20-1	N	pCi/L	1.24	J+	Y	0.508	0.907	0.907	0.907	Y	Y	1	NA

Facility: Bremo Power Station
SDG: 92750043

Lab Sample ID	L1773890-03
Sys Sample Code	082724NMW33
Sample Name	082724NMW33
Sample Date	8/27/2024 3:10:00 PM
Location	BPS-NAP-MW-33 / MW-33
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	0.412	U		0.312				N	Y	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	0.241	U		0.200	0.296	0.296	0.296	N	Y	1	NA
SW-846 9320	RADIUM-228	15262-20-1	N	pCi/L	0.172	U		0.240	0.440	0.440	0.440	N	Y	1	NA

Facility: Bremo Power Station
SDG: 92750043

Lab Sample ID	L1773890-04
Sys Sample Code	082724NMW34
Sample Name	082724NMW34
Sample Date	8/27/2024 4:25:00 PM
Location	BPS-NAP-MW-34 / MW-34
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	0.216	U	S	0.296				N	Y	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	0.216	U		0.170	0.230	0.230	0.230	N	Y	1	NA
SW-846 9320	RADIUM-228	15262-20-1	N	pCi/L	-0.0904	U		0.242	0.452	0.452	0.452	N	Y	1	NA

Facility: Bremo Power Station
SDG: 92750043

Lab Sample ID	L1773890-05
Sys Sample Code	082724NMW35
Sample Name	082724NMW35
Sample Date	8/27/2024 12:35:00 PM
Location	BPS-NAP-MW-35 / MW-35
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	1.19	J	S	0.400				Y	Y	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	0.868			0.299	0.231	0.231	0.231	Y	Y	1	NA
SW-846 9320	RADIUM-228	15262-20-1	N	pCi/L	0.326	U		0.266	0.484	0.484	0.484	N	Y	1	NA

Facility: Bremo Power Station
SDG: 92750043

Lab Sample ID	L1773890-06
Sys Sample Code	082724NNPFDDUPLICATE
Sample Name	082724NNPFDDUPLICATE
Sample Date	8/27/2024 12:30:00 PM
Location	BPS-NAP-MW-24 / MW-24
Sample Type	FD
Matrix	GW
Parent Sample	082724NMW24

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	2.17	J	Y,FD	0.427				Y	Y	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	1.06	J	FD	0.320	0.184	0.184	0.184	Y	Y	1	NA
SW-846 9320	RADIUM-228	15262-20-1	N	pCi/L	1.11	J+	Y	0.283	0.493	0.493	0.493	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:

92749754

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
082624NMW25D	MW-25D	N	SW-846 6010D	Boron	T	20.6	J	RL	4.0	50.0		ug/L
082624NMW25D	MW-25D	N	SW-846 6010D	Copper	T	1.7	J	RL	0.62	5.0		ug/L
082624NMW25D	MW-25D	N	SW-846 6010D	Nickel	T	2.9	J	RL	0.88	5.0		ug/L
082624NMW25D	MW-25D	N	SW-846 6010D	Zinc	T	4.4	J	RL	3.0	10.0		ug/L
082624NMW25D	MW-25D	N	SW-846 6020B	Cobalt	T	0.78	J	RL	0.14	1.0		ug/L
082624NMW25D	MW-25D	N	SW-846 6020B	Lead	T	0.52	J	RL	0.18	1.0		ug/L
082624NMW25D	MW-25D	N	SW-846 7199	Chromium, Hexavalent	D		U	BF,H,M	0.0080	0.025		ug/L
082624NMW25D	MW-25D	N	SW-846 9056A	Nitrate as N	N		UJ	H	0.060	0.10		mg/L
082624NMW26S	MW-26S	N	SW-846 6020B	Iron	T		U	BL	18.4	20.0		ug/L
082624NMW26S	MW-26S	N	SW-846 6020B	Lithium	T	0.83	J	RL	0.33	2.5		ug/L
082624NMW26S	MW-26S	N	SW-846 7199	Chromium, Hexavalent	D	0.27	J+	M	0.0043	0.025		ug/L
082624NMW26S	MW-26S	N	SW-846 9056A	Nitrate as N	N		UJ	H	0.060	0.10		mg/L
082624NMW26D	MW-26D	N	EPA 350.1	Nitrogen, Ammonia	N	0.035	J	RL	0.031	0.10		mg/L
082624NMW26D	MW-26D	N	SW-846 6010D	Boron	T	6.0	J	RL	4.0	50.0		ug/L
082624NMW26D	MW-26D	N	SW-846 6010D	Molybdenum	T	3.1	J	RL	2.6	5.0		ug/L
082624NMW26D	MW-26D	N	SW-846 6010D	Nickel	T	1.2	J	RL	0.88	5.0		ug/L
082624NMW26D	MW-26D	N	SW-846 6010D	Silver	T	0.92	J	RL	0.49	5.0		ug/L
082624NMW26D	MW-26D	N	SW-846 6020B	Cobalt	T	0.58	J	RL	0.14	1.0		ug/L
082624NMW26D	MW-26D	N	SW-846 7199	Chromium, Hexavalent	D	0.14	J+	M	0.0043	0.025		ug/L
082624NMW26D	MW-26D	N	SW-846 9056A	Nitrate as N	N		UJ	H	0.060	0.10		mg/L
082624NMW28	MW-28	N	SW-846 6010D	Chromium	T	1.2	J	RL	0.63	5.0		ug/L
082624NMW28	MW-28	N	SW-846 6010D	Vanadium	T	2.0	J	RL	1.6	5.0		ug/L
082624NMW28	MW-28	N	SW-846 6020B	Lithium	T	1.5	J	RL	0.33	2.5		ug/L
082624NMW28	MW-28	N	SW-846 7199	Chromium, Hexavalent	D	0.25	J	H,M	0.022	0.12		ug/L
082624NMW28	MW-28	N	SW-846 9056A	Nitrate as N	N	0.26	J	H	0.060	0.10		mg/L
082724NMW25S	MW-25S	N	SW-846 6010D	Boron	T	15.0	J	RL	4.0	50.0		ug/L
082724NMW25S	MW-25S	N	SW-846 6010D	Copper	T	1.2	J	RL	0.62	5.0		ug/L
082724NMW25S	MW-25S	N	SW-846 6010D	Nickel	T	0.94	J	RL	0.88	5.0		ug/L
082724NMW25S	MW-25S	N	SW-846 6010D	Silver	T	2.2	J	RL	0.49	5.0		ug/L
082724NMW25S	MW-25S	N	SW-846 6020B	Lithium	T	0.90	J	RL	0.33	2.5		ug/L

Sample	Location	Sample Type	Method	Analyte	T/D	Result	Qual	Reason Code(s)	MDL	QL	Uncertainty	Unit
082724NMW25S	MW-25S	N	SW-846 6020B	Tin	T	0.16	J	RL	0.14	1.0		ug/L
082724NMW25S	MW-25S	N	SW-846 7199	Chromium, Hexavalent	D		U	BF,H	0.083	0.083		ug/L
082724NMW25S	MW-25S	N	SW-846 9056A	Fluoride	N	0.072	J	RL	0.050	0.10		mg/L
082724NMW27S	MW-27S	N	SW-846 6010D	Copper	T	0.83	J	RL	0.62	5.0		ug/L
082724NMW27S	MW-27S	N	SW-846 6010D	Nickel	T	1.6	J	RL	0.88	5.0		ug/L
082724NMW27S	MW-27S	N	SW-846 6010D	Silver	T	2.5	J	RL	0.49	5.0		ug/L
082724NMW27S	MW-27S	N	SW-846 6010D	Vanadium	T	4.2	J	RL	1.6	5.0		ug/L
082724NMW27S	MW-27S	N	SW-846 6020B	Cobalt	T	0.15	J	RL	0.14	1.0		ug/L
082724NMW27S	MW-27S	N	SW-846 7199	Chromium, Hexavalent	D	0.93	J	H	0.022	0.12		ug/L
082624NMW25D	MW-25D	N	CALC	Combined Radium	N	1.28	J+	Y			0.405	pCi/L
082624NMW25D	MW-25D	N	SW-846 9320	RADIUM-228	N	0.551	J+	Y	0.500	0.500	0.278	pCi/L
082624NMW26S	MW-26S	N	CALC	Combined Radium	N	0.312	J	S			0.341	pCi/L
082624NMW26D	MW-26D	N	CALC	Combined Radium	N	0.313	J	S			0.320	pCi/L
082624NMW28	MW-28	N	CALC	Combined Radium	N	1.10	J+	Y			0.331	pCi/L
082624NMW28	MW-28	N	SW-846 9320	RADIUM-228	N	0.740	J+	Y	0.480	0.480	0.268	pCi/L
082724NMW25S	MW-25S	N	CALC	Combined Radium	N	0.937	J+	Y,S			0.308	pCi/L
082724NMW25S	MW-25S	N	SW-846 9320	RADIUM-228	N	0.721	J+	Y	0.425	0.425	0.239	pCi/L
082724NMW27S	MW-27S	N	CALC	Combined Radium	N	1.75	J+	Y			0.348	pCi/L
082724NMW27S	MW-27S	N	SW-846 9320	RADIUM-228	N	1.45	J+	Y	0.458	0.458	0.267	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: 92749754

Lab Sample ID	92749754001
Sys Sample Code	082624NMW25D
Sample Name	082624NMW25D
Sample Date	8/26/2024 3:30:00 PM
Location	BPS-NAP-MW-25D / MW-25D
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	79200				36.8	36.8	662	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	173				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	21.2				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	20.6	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	25200				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	1.7	J	RL		0.62	0.62	5.0	Y	Yes	1	NA
	Molybdenum	7439-98-7	T	ug/L	11.1				2.6	2.6	5.0	Y	Yes	1	NA
	Nickel	7440-02-0	T	ug/L	2.9	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	4.4	J	RL		3.0	3.0	10.0	Y	Yes	1	NA
SW-846 6020B	Cobalt	7440-48-4	T	ug/L	0.78	J	RL		0.14	0.14	1.0	Y	Yes	1	NA
	Iron	7439-89-6	T	ug/L	736				3.0	3.0	20.0	Y	Yes	1	NA
	Lead	7439-92-1	T	ug/L	0.52	J	RL		0.18	0.18	1.0	Y	Yes	1	NA
	Lithium	7439-93-2	T	ug/L	2.9				0.33	0.33	2.5	Y	Yes	1	NA
	Manganese	7439-96-5	T	ug/L	125				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		U	BF,H,M		0.0080	0.0080	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	9.6				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	92749754001
Sys Sample Code	082624NMW25D
Sample Name	082624NMW25D
Sample Date	8/26/2024 3:30:00 PM
Location	BPS-NAP-MW-25D / MW-25D
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	18.6				0.50	0.50	1.0	Y	Yes	1	NA

Lab Sample ID	92749754002
Sys Sample Code	082624NMW26S
Sample Name	082624NMW26S
Sample Date	8/26/2024 2:00:00 PM
Location	BPS-NAP-MW-26S / MW-26S
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	26000				36.8	36.8	662	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	104				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	18.3				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		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	8110				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		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	BL		18.4	18.4	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	0.83	J	RL		0.33	0.33	2.5	Y	Yes	1	NA
	Manganese	7439-96-5	T	ug/L	3.1				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	0.27	J+	M		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	2.6				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	92749754002
Sys Sample Code	082624NMW26S
Sample Name	082624NMW26S
Sample Date	8/26/2024 2:00:00 PM
Location	BPS-NAP-MW-26S / MW-26S
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	2.1				0.50	0.50	1.0	Y	Yes	1	NA

Lab Sample ID	92749754003
Sys Sample Code	082624NMW26D
Sample Name	082624NMW26D
Sample Date	8/26/2024 1:10:00 PM
Location	BPS-NAP-MW-26D / MW-26D
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	0.035	J	RL		0.031	0.031	0.10	Y	Yes	1	NA
SM 2340B	Hardness, Total(SM 2340B)	HARD	N	ug/L	133000				36.8	36.8	662	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	273				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	162				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	6.0	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	40000				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	3.1	J	RL		2.6	2.6	5.0	Y	Yes	1	NA
	Nickel	7440-02-0	T	ug/L	1.2	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	0.92	J	RL		0.49	0.49	5.0	Y	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	0.58	J	RL		0.14	0.14	1.0	Y	Yes	1	NA
	Iron	7439-89-6	T	ug/L	2280				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	5.4				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	0.14	J+	M		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	10.2				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	92749754003
Sys Sample Code	082624NMW26D
Sample Name	082624NMW26D
Sample Date	8/26/2024 1:10:00 PM
Location	BPS-NAP-MW-26D / MW-26D
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	51.0				0.50	0.50	1.0	Y	Yes	1	NA

Lab Sample ID	92749754004
Sys Sample Code	082624NMW28
Sample Name	082624NMW28
Sample Date	8/26/2024 3:15:00 PM
Location	BPS-NAP-MW-28 / MW-28
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	230000				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		U			2.5	2.5	10.0	N	Yes	1	NA
	Barium	7440-39-3	T	ug/L	46.3				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	246				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	58200				14.7	14.7	100	Y	Yes	1	NA
	Chromium	7440-47-3	T	ug/L	1.2	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	12.1				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	2.0	J	RL		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		U			0.14	0.14	1.0	N	Yes	1	NA
	Iron	7439-89-6	T	ug/L	218				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	1.5	J	RL		0.33	0.33	2.5	Y	Yes	1	NA
	Manganese	7439-96-5	T	ug/L	12.7				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	0.25	J	H,M		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	9.6				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	92749754004
Sys Sample Code	082624NMW28
Sample Name	082624NMW28
Sample Date	8/26/2024 3:15:00 PM
Location	BPS-NAP-MW-28 / MW-28
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	0.26	J	H		0.060	0.060	0.10	Y	Yes	1	NA
SW-846 9056A	Sulfate	14808-79-8	N	mg/L	93.6				1.0	1.0	2.0	Y	Yes	2	NA

Lab Sample ID	92749754005
Sys Sample Code	082724NMW25S
Sample Name	082724NMW25S
Sample Date	8/27/2024 1:40:00 PM
Location	BPS-NAP-MW-25S / MW-25S
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	138000				36.8	36.8	662	Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	222				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	11.6				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	15.0	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	39400				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	1.2	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	0.94	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	2.2	J	RL		0.49	0.49	5.0	Y	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	1.9				0.14	0.14	1.0	Y	Yes	1	NA
	Iron	7439-89-6	T	ug/L	331				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	0.90	J	RL		0.33	0.33	2.5	Y	Yes	1	NA
	Manganese	7439-96-5	T	ug/L	83.5				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	0.16	J	RL		0.14	0.14	1.0	Y	Yes	1	NA
SW-846 7199	Chromium, Hexavalent	18540-29-9	D	ug/L		U	BF,H		0.083	0.083	0.083	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	8.4				0.60	0.60	1.0	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L	0.072	J	RL		0.050	0.050	0.10	Y	Yes	1	NA

Lab Sample ID	92749754005
Sys Sample Code	082724NMW25S
Sample Name	082724NMW25S
Sample Date	8/27/2024 1:40:00 PM
Location	BPS-NAP-MW-25S / MW-25S
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	15.6				0.50	0.50	1.0	Y	Yes	1	NA

Lab Sample ID	92749754006
Sys Sample Code	082724NMW27S
Sample Name	082724NMW27S
Sample Date	8/27/2024 3:15:00 PM
Location	BPS-NAP-MW-27S / MW-27S
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	505000				368	368	6620	Y	Yes	10	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	663				25.0	25.0	25.0	Y	Yes	1	NA
SW-846 6010D	Calcium	7440-70-2	T	ug/L	117000				147	147	1000	Y	Yes	10	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	77.3				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	1410				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
	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	0.83	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	1.6	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	2.5	J	RL		0.49	0.49	5.0	Y	Yes	1	NA
	Vanadium	7440-62-2	T	ug/L	4.2	J	RL		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	0.15	J	RL		0.14	0.14	1.0	Y	Yes	1	NA
	Iron	7439-89-6	T	ug/L	27.9				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	4.6				0.33	0.33	2.5	Y	Yes	1	NA
	Manganese	7439-96-5	T	ug/L	31.5				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	0.93	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	10.8				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	92749754006
Sys Sample Code	082724NMW27S
Sample Name	082724NMW27S
Sample Date	8/27/2024 3:15:00 PM
Location	BPS-NAP-MW-27S / MW-27S
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
SW-846 9056A	Sulfate	14808-79-8	N	mg/L	155				1.5	1.5	3.0	Y	Yes	3	NA

Lab Sample ID	L1773898-01
Sys Sample Code	082624NMW25D
Sample Name	082624NMW25D
Sample Date	8/26/2024 3:30:00 PM
Location	BPS-NAP-MW-25D / MW-25D
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	1.28	J+	Y	0.405				Y	Y	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	0.731			0.294	0.300	0.300	0.300	Y	Y	1	NA
SW-846 9320	RADIUM-228	15262-20-1	N	pCi/L	0.551	J+	Y	0.278	0.500	0.500	0.500	Y	Y	1	NA

Lab Sample ID	L1773898-02
Sys Sample Code	082624NMW26S
Sample Name	082624NMW26S
Sample Date	8/26/2024 2:00:00 PM
Location	BPS-NAP-MW-26S / MW-26S
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	0.312	J	S	0.341				Y	Y	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	0.312			0.194	0.230	0.230	0.230	Y	Y	1	NA
SW-846 9320	RADIUM-228	15262-20-1	N	pCi/L	-0.639	U		0.281	0.536	0.536	0.536	N	Y	1	NA

Lab Sample ID	L1773898-03
Sys Sample Code	082624NMW26D
Sample Name	082624NMW26D
Sample Date	8/26/2024 1:10:00 PM
Location	BPS-NAP-MW-26D / MW-26D
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	0.313	J	S	0.320				Y	Y	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	0.313			0.194	0.231	0.231	0.231	Y	Y	1	NA
SW-846 9320	RADIUM-228	15262-20-1	N	pCi/L	-0.157	U		0.254	0.475	0.475	0.475	N	Y	1	NA

Facility: Bremo Power Station
SDG: 92749754

Lab Sample ID	L1773898-04
Sys Sample Code	082624NMW28
Sample Name	082624NMW28
Sample Date	8/26/2024 3:15:00 PM
Location	BPS-NAP-MW-28 / MW-28
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	1.10	J+	Y	0.331				Y	Y	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	0.361			0.194	0.184	0.184	0.184	Y	Y	1	NA
SW-846 9320	RADIUM-228	15262-20-1	N	pCi/L	0.740	J+	Y	0.268	0.480	0.480	0.480	Y	Y	1	NA

Lab Sample ID	L1773898-05
Sys Sample Code	082724NMW25S
Sample Name	082724NMW25S
Sample Date	8/27/2024 1:40:00 PM
Location	BPS-NAP-MW-25S / MW-25S
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	0.937	J+	Y,S	0.308				Y	Y	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	0.216	U		0.194	0.295	0.295	0.295	N	Y	1	NA
SW-846 9320	RADIUM-228	15262-20-1	N	pCi/L	0.721	J+	Y	0.239	0.425	0.425	0.425	Y	Y	1	NA

Facility: Bremo Power Station
SDG: 92749754

Lab Sample ID	L1773898-06
Sys Sample Code	082724NMW27S
Sample Name	082724NMW27S
Sample Date	8/27/2024 3:15:00 PM
Location	BPS-NAP-MW-27S / MW-27S
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	1.75	J+	Y	0.348				Y	Y	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	0.304			0.223	0.291	0.291	0.291	Y	Y	1	NA
SW-846 9320	RADIUM-228	15262-20-1	N	pCi/L	1.45	J+	Y	0.267	0.458	0.458	0.458	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:

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

