2021 CCR Annual Groundwater Monitoring and Corrective Action Report

Mount Storm Power Station
Low Volume Waste Settling Ponds

Prepared for:

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January 31, 2022

TABLE OF CONTENTS

TABLE OF CONTENTS – CONTINUED

LIST OF TABLES

LIST OF DRAWINGS

LIST OF APPENDICES

EXECUTIVE SUMMARY

This *2021 CCR Annual Groundwater Monitoring and Corrective Action Report* (Report) was prepared on behalf of Virginia Electric and Power Company d/b/a Dominion Energy Virginia (Dominion Energy) for the Mt. Storm Power Station (Station) Low Volume Waste Settling Ponds (LVWSP) located in Mt. Storm, West Virginia. As active settling ponds that accept CCR, the LVWSP are considered existing surface impoundments under Title 40 Code of Federal Regulations (CFR) Part 257.50 *et seq.* [Disposal of Coal Combustion Residuals (CCR) from Electric Utilities (CCR Rule; Federal Register Vol. 80, No. 74, 21302-21501 on April 17, 2015, as amended)]. Pursuant to the CCR Rule, the Station is required to complete an *Annual Groundwater Monitoring and Corrective Action Report* (Report) by January 31st annually.

The Report documents the status of the CCR groundwater monitoring program for the LVWSP, summarizes key actions completed, describes issues encountered, actions taken to resolve identified concerns, and proposed key activities for calendar year 2021. More specifically, this Report describes the results of the CCR Rule Assessment Monitoring Program (AMP) activities performed in 2021 to comply with CCR Rule requirements, and the progression of future sampling activities pursuant to the CCR Rule and the LVWSP's *Groundwater Monitoring Program* (GMP).

In accordance with 40 CFR Part 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 2021, the Unit was operating under the AMP in §257.95.

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 2021, the Unit was operating under the AMP in §257.95.

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

   (A) Identify those constituents listed in appendix III to this part and the names of the monitoring wells associated with such an increase
   - In 2021, there were statistically significant increases identified over background for the following Appendix III constituents at the following wells during the second semi-annual 2020 event and the first semi-annual 2021 event:
     - Boron – well OW-12
     - Chloride – upgradient well OW-8

   (B) Provide the date when the assessment program was initiated for the CCR unit.
   - The Unit initiated the assessment monitoring program on April 20, 2018.

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

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

- In 2021, there were no confirmed statistically significant increases over the groundwater protection standard.

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

- Not applicable

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

- Not applicable

(D) Provide the date when the assessment of corrective measures was completed for the CCR unit

- Not applicable

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

- Not applicable

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

- Not applicable

Based on the 2021 sampling and data analysis results, Golder recommends that Dominion Energy continue to maintain an AMP at this Unit.

1.0 INTRODUCTION

This *2021 CCR Annual Groundwater Monitoring and Corrective Action Report* (Report) was prepared on behalf of Virginia Electric and Power Company d/b/a Dominion Energy Virginia (Dominion Energy) for the Mt. Storm Power Station (Station) Low Volume Waste Settling Ponds (LVWSP), located in Mt. Storm, West Virginia. The existing LVWSP are subject to the groundwater monitoring requirements in Title 40 Code of Federal Regulations (CFR) Part 257.50 *et seq.* [Disposal of Coal Combustion Residuals (CCR) from Electric Utilities (CCR Rule; Federal Register Vol. 80, No. 74, 21302-21501 on April 17, 2015, as amended)] (EPA, 2015, 2016, 2018, 2020a, 2020b). Pursuant to the CCR Rule, no later than January 31st annually, the owner or operator of CCR surface impoundments must prepare an annual groundwater monitoring and corrective action report for the CCR surface impoundments documenting the status of groundwater monitoring and corrective action programs for the preceding year.

Golder Associates USA Inc. (Golder) has prepared this Report for the LVWSP on behalf of Dominion Energy in accordance with CCR Rule Part 257.90(e). This Report presents relevant data evaluations from the second semi-annual 2020 event that were completed in 2021, provides the monitoring data and required data evaluations for the first semi-annual CCR monitoring compliance event performed in April 2021, and provides the monitoring data for the second semi-annual CCR monitoring compliance event performed in November 2021.

1.1 Site Location

The Station is located at 436 Dominion Boulevard in Mt. Storm, West Virginia approximately 40 miles south-southwest of Cumberland, Maryland. The LVWSP are located directly south of the Station. A Site Location Map is presented as Drawing 1.

1.2 Site History

The Station and adjoining 1,200-acre Mt. Storm Lake were constructed in 1965. Historically, the LVWSP consisted of five low volume waste settling ponds (Pyrite Pond and Ponds A, B, C, and D) which collected wastewater from within the Station that included CCR carryover from the fly ash silos and bottom ash hydrobins. The Station has reconfigured the LVWSP by retrofitting the Pyrite Pond, closing the remaining ponds, and reconstructing Ponds A and B in compliance with the CCR Rule. Construction of the new ponds was completed in 2019. Groundwater monitoring at the LVWSP is required under the CCR Rule and was initiated in 2015.

1.3 Key Actions

Key actions for this Facility to date are as follows:

- Permitted for management of CCR by the West Virginia Department of Environmental Protection (DEP) under National Discharge Elimination System (NPDES) permit No. WV0005525;

- Initiated the Detection Monitoring Program (DMP) on November 3, 2015, with the collection of eight (8) baseline/background samples and completed the background monitoring activities on August 15, 2017, pursuant to the CCR Rule [257.94(b)];
- Conducted the initial DMP compliance sampling event between October 10-11, 2017, and completed the sample analyses on October 24, 2017, pursuant to the CCR Rule [257.94];
- Placed a copy of the LVWSP's *Groundwater Monitoring Program* (GMP) documenting the design information for the monitoring wells pursuant to the CCR Rule [257.91(e)(1)] in the Station's operating record on October 17, 2017, pursuant to the CCR Rule [257.105(h)(2)];
- Certified the groundwater monitoring system pursuant to the CCR Rule [257.91(e)(1) and posted the Certification in the Station'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 Station'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 the LVWSP's background concentrations under the DMP in the Station's operating record on January 22, 2018;
- Conducted the initial Assessment Monitoring Program (AMP) compliance sampling event on March 19-20, 2018, and completed the sample analyses on April 20, 2018, pursuant to the CCR Rule [257.95(b)];
- Established groundwater protection standards (GWPS) for detected constituents in Appendix IV of Part 257 on October 17, 2018, pursuant to the CCR Rule [257.95(d)(2)];
- Background concentrations of Appendix III and IV constituents were updated using United States Environmental Protection Agency-approved statistical procedures on November 19, 2019;
- Background concentrations of Appendix III and IV constituents were updated using United States Environmental Protection Agency-approved statistical procedures on September 14, 2020;
- Conducted the first semi-annual 2021 AMP compliance sampling event on April 29-30, 2021, and completed the sample analyses on June 11, 2021 (revised June 18, 2021), pursuant to the CCR Rule [257.95(d)(1)]; and

- Conducted the second semi-annual 2021 AMP compliance sampling event on November 4, 2021, and completed the sample analyses on December 15, 2021, pursuant to the CCR Rule [257.95(d)(1)].

1.4 Monitoring Program Concerns

There were no monitoring program concerns identified during the 2021 AMP compliance events.

2.0 SITE INFORMATION

The Station is a coal-fired power station with a generating capacity of approximately 1,600 megawatts. The first power generation turbine at the Station went online in September 1965 and was followed by the second turbine in June 1966. The third turbine went online December 1973. The LVWSP are located on the Station property directly south of the Station. The LVWSP consist of five low volume waste settling ponds (Pyrite Pond and Ponds A, B, C, and D). The Pyrite Pond is primarily intended to collect materials that cannot be processed by the coal grinding mill and consists of primarily rock but can also be configured to accept receiving water intended for Ponds A or B in an emergency. As originally designed, Ponds A and B were the primary settling ponds and Ponds C and D were the secondary settling ponds. Discharge from the secondary settling ponds is to Mount Storm Lake pursuant to West Virginia/National Pollutant Discharge Elimination System (WV/NPDES) Permit Number WV0005525. The Station has since reconfigured the LVWSP by retrofitting the Pyrite Pond, closing the remaining ponds, and reconstructing Ponds A and B in compliance with the CCR Rule. Construction of the new ponds was completed in 2019.

As part of the Station operations, Dominion Energy operates the LVWSP for CCR storage. As existing CCR surface impoundments, the LVWSP were subject to the groundwater monitoring provisions of the CCR Rule by October 17, 2017.

2.1 Monitoring Well Network

The LVWSP's GMP (TRC, 2017a) details the design of the CCR Rule groundwater monitoring network. As presented in the GMP, the monitoring network is comprised of two (2) upgradient/background wells (OW-7A and OW-8) and five (5) downgradient monitoring wells (OW-2A, OW-4A, OW-10, OW-12, and OW-13) designed to monitor the uppermost aquifer beneath the LVWSP. The groundwater monitoring well locations relative to the LVWSP are shown on Drawing 2.

In addition, the Station maintains fifteen (15) additional wells (OW-2, OW-4, OW-6A, OW-6B, OW-7B, OW-8A, OW-9A, OW-9B, OW-11, OW-14, OW-15, OW-16A, OW-17A, OW-18A, and OW-19) that are presently used for periodic water level monitoring activities.

2.1.1 Monitoring Well Installation and Decommissioning Activities

No groundwater monitoring wells associated with the CCR compliance well network were installed or decommissioned in calendar year 2021.

2.2 Geology and Hydrogeology

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

2.2.1 Geology

As presented on the West Virginia geologic map, the Station is located within the high plateau region of the Appalachian High Plateau physiographic province (Cardwell, 1968). The high plateau area is underlain by Paleozoic sedimentary rocks (Ordovician to Mississippian age) and the rocks are folded into a sequence of northeasterly trending parallel anticline and synclines. Locally the area is referred to as the Allegheny Mountains. The Station is located on the eastern limb of the Blackwater Anticline which parallels the Little Blackwater River.

The area is underlain by formations of the Pennsylvanian-age Conemaugh and Allegheny Groups, which include, in descending order:

- Conemaugh Group
  - Buffalo Sandstone
  - Brush Creek shale and sandstone
  - Upper and Lower Mahoning Sandstones
  - Uffington Shale
- Allegheny Group
  - Upper Freeport Coal
  - Bolivar Claystone
  - Upper Freeport Sandstone
  - Lower Freeport Coal

The near surface geology is comprised of unconsolidated colluvium sediments that locally overlie decomposed (saprolitic) sandstone and shale transitioning to fractured competent sandstone and shale interbedded with coal beds. At the Station, the upper Brush Creek and Mahoning coal beds of the Conemaugh Group are absent, while the Upper Freeport and Lower Freeport coal beds of the Allegheny Group are present. The Upper Freeport coal bed is reported to have been mined using a combination of open pit and longwall mining technology, while the Lower Freeport coal bed is reported to be unmined.

2.2.2 Hydrogeology

Two (2) regional aquifers have been identified at the LVWSP; the water table aquifer made up of shale and sandstone units of the Conemaugh Group and a lower leaky confined coal aquifer located within the Upper Freeport Coal of the underlying Allegheny Formation (USGS, 1991). As reported in the Hydrogeological Evaluation Report (TRC, 2016), the Upper Freeport Coal is located immediately below the base of the Conemaugh Group and ranges in thickness from approximately 3.5 to 8 feet. The remainder of the Allegheny Formation and upper portion of the underlying Pottsville Group consists predominately of shale and fire clay with a few relatively thin layers of coal and sandstone. These shale and clay layers effectively impede the vertical migration of groundwater and represent the lower boundary for the uppermost aquifer at the LVWSP. Therefore, the uppermost aquifer underlying the LVWSP consists of the water table aquifer and the underlying leaky confined Upper Freeport Coal. The uppermost aquifer is unconfined and extends vertically into the lowered fractured bedrock formations with the uppermost shale formation acting as an aquitard. Prior to retrofit of the LVWSPs in 2019, the groundwater flow direction in the uppermost aquifer beneath the LVWSP was towards the south and east. As part of the LVWSP retrofit activities in 2018 and 2019 a dewatering system was installed to maintain a depressed groundwater table beneath the lined LVWSPs. Following installation of the dewatering system the groundwater flow direction in the uppermost aquifer beneath the LVWSP changed from the historical southerly and easterly flow directions to a convergent flow direction that is convergent from all four (4) compass points on the dewatering system installed beneath the LVWSP.

2.2.3 Potentiometric Surface Evaluation

Historical static water level data for the LVWSP are summarized in Table 1. Consistent with the requirements of the CCR Rule, the rate and direction of groundwater flow within the uppermost aquifer beneath the LVWSP was determined after each sampling event. The Potentiometric Surface Map presented as Drawing 2 was prepared using static water level data obtained during the first semi-annual AMP event on April 28-29, 2021, within a 24-hour period. The Potentiometric Surface Map presented as Drawing 3 was prepared using static water level data obtained during the second semi-annual AMP event on November 4, 2021.

Prior to May 2017 when construction dewatering activities associated with Ponds A, B, and C were initiated, the groundwater gradient and flow direction was generally from the north towards the south and east in the direction of the adjoining Mt. Storm Lake. The monitoring network for the LVWSPs was designed on the basis of this “historical” gradient direction. Beginning around May 2017, construction dewatering activities coupled with the subsequent operation of a permanent dewatering system and the decommissioning of Pond D resulted in an inward gradient developing beneath the LVWSPs, such that the downgradient wells are now upgradient from the LVWSPs and recovered groundwater from the system is managed per Station permits. This condition is expected to continue until such time as the operation of the LVWSPs ceases and the dewatering system operation is terminated. Dominion Energy continues to evaluate the hydrogeologic conditions for the ponds and will make changes to the monitoring program as appropriate.

Therefore, based on network review and regulatory requirements, Golder believes that the groundwater monitoring wells continue to be operated and maintained so that they perform to the design specifications in the Groundwater Monitoring System Certification for the LVWSPs (TRC, 2017b) consistent with 40CFR Part 257.91(e)(2) of the CCR Rule.

Using the groundwater contours presented as an overlay on Drawings 2 and 3, the average hydraulic gradient for the uppermost aquifer in the study area was calculated for each monitoring event using the following equations.

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

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

The groundwater flow rate was calculated using the following formula:

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

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

Using the estimated effective porosity value of 10% for gravelly clay and 20% for weathered rock, the estimated average (geometric) hydraulic conductivity value of 7.06E-04 cm/s calculated from aquifer test data obtained from 15 wells, and the calculated gradients, the average rate of groundwater flow (*Vgw*) for the uppermost aquifer beneath the LVWSP was calculated and is summarized in the following table.

Groundwater Flow	Hydraulic Conductivity (k, cm/s)	Contour lines (feet amsl)	Flow Length (feet)	Average Gradient (i)	Assumed Porosity (Ø)	Estimated Groundwater Velocity	
						(cm/s)	(feet/year)
1st Semi-Annual Assessment Monitoring Program Event (April 2021)							
Vgw	7.06E-04	3252-3242	195	0.043	0.10	3.04E-04	312
		3258-3242	243				
		3244-3242	178		0.20	1.52E-04	156

Groundwater Flow	Hydraulic Conductivity (k, cm/s)	Contour lines (feet amsl)	Flow Length (feet)	Average Gradient (i)	Assumed Porosity (Ø)	Estimated Groundwater Velocity	
						(cm/s)	(feet/year)
2nd Semi-Annual Assessment Monitoring Program Event (November 2021)							
Vgw	7.06E-04	3252-3242	195	0.049	0.10	3.43-04	354
		3260-3242	247				
		3246-3242	187		0.20	1.71E-04	177

As presented, the estimated average groundwater flow rate in the uppermost aquifer north of the LVWSP was variable depending on lithology and ranged from approximately 155 to 354 feet per year. The calculated flow rate for the events conducted in 2021 is generally consistent with previous calculations for the LVWSP.

3.0 FIELD ACTIVITIES

Pursuant to the requirements in 40 CFR 257.95(d)(1) two (2) semi-annual AMP monitoring events were completed for the LVWSP for the constituents and parameters listed in Appendix III and Appendix IV of the CCR Rule. Summaries of the AMP sampling events are presented below.

Monitoring Event	Sample Dates	Final Laboratory Package Receipt Date
1st Semi-Annual Assessment Monitoring Program Event	April 29-30, 2021	June 11, 2021 (revised June 18, 2021)
2nd Semi-Annual Assessment Monitoring Program Event	November 4, 2021	December 15, 2021

During each of the AMP sampling events, the compliance monitoring wells were sampled in accordance with the procedures presented in the Station's GMP (TRC, 2017a).

Samples collected during each of the sampling events were shipped via FedEx on ice in secured coolers under chain-of-custody control to Eurofins TestAmerica Laboratories Inc. (TestAmerica) in North Canton, Ohio (#210). Total dissolved solids and radium samples were then shipped to the Pittsburgh, Pennsylvania (#142) and St. Louis, Missouri (#381) locations of TestAmerica for analysis. The three (3) TestAmerica locations are West Virginia Department of Environmental Protection accredited laboratories for CCR Rule Appendix III and IV constituents analyzed.

4.0 LABORATORY ANALYTICAL RESULTS

Laboratory analytical results from the AMP sampling events conducted in 2021 are summarized in the following sections.

4.1 2nd Semi-Annual 2020 Assessment Monitoring Program Event

The groundwater samples collected during the second semi-annual 2020 AMP event were analyzed by TestAmerica for the presence of concentrations of the constituents and parameters listed in Appendix III of the CCR rule and previously detected constituents and parameters of the following Appendix IV of the CCR Rule detects. The laboratory certificates of analysis, chain-of-custody forms, and field logs for the sampling event were previously submitted in the *2020 CCR Annual Groundwater Monitoring and Corrective Action Report*. A summary of the CCR sampling data for the Unit is presented in Table 2.

4.2 1st Semi-Annual 2021 Assessment Monitoring Program Event

The groundwater samples collected during the first semi-annual AMP event were analyzed by TestAmerica for the presence of concentrations of the constituents and parameters listed in Appendix III and Appendix IV of the CCR Rule. The laboratory certificates of analysis, chain-of-custody forms, and field logs for the sampling event are presented in Appendix A. A summary of the CCR sampling data for the LVWSP is presented in Table 3.

4.3 2nd Semi-Annual 2021 Assessment Monitoring Program Event

The groundwater samples collected during the second semi-annual AMP event were analyzed by TestAmerica for the presence of concentrations of the constituents and parameters listed in Appendix III of the CCR rule and previously detected CCR Rule Appendix IV constituents. The current list of Appendix IV detects is as follows:

- Arsenic
- Barium
- Beryllium
- Cadmium
- Chromium
- Cobalt
- Fluoride
- Lead
- Lithium
- Molybdenum
- Selenium
- Thallium
- Total Radium

The laboratory certificates of analysis, chain-of-custody forms, and field logs for the sampling event are presented in Appendix B. A summary of the CCR sampling data for the LVWSP is presented in Table 4.

5.0 DATA QUALITY VALIDATION

The Quality Assurance (QA) and quality control (QC) data provided by the laboratory for the AMP sampling events were reviewed to ensure that the analytical results met the project's data quality objectives as outlined in the Station's GMP (TRC, 2017a). 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).

5.1 1st Semi-Annual 2021 Compliance Event Findings

The laboratory and field QA/QC data for the first semi-annual compliance monitoring event samples collected April 29-30, 2021, were reviewed by ESI in accordance with United States Environmental Protection Agency (EPA) Protocol. Field QA/QC samples for this event included a field blank and a duplicate sample that was collected from compliance well OW-4A that were collected at the LVWSP on April 29, 2021. These QA/QC samples were analyzed for the same constituents as the groundwater samples. Based on review of the laboratory-provided QC data and EPA guidance recommendations, the data for this sampling event were determined to meet the data quality objectives for the project with the provided data qualifiers. It is noted that due to field blank contamination, radium analysis for several samples were flagged as estimated. A copy of the data validation record is presented in Appendix A.

5.2 2nd Semi-Annual 2021 Compliance Event Findings

The laboratory and field QA/QC data for the second semi-annual compliance monitoring event samples collected November 4, 2021, were reviewed by ESI in accordance with EPA Protocol. Field QA/QC samples for this event included a field blank and a duplicate sample that was collected from compliance well OW-4A that were collected at the LVWSP on November 4, 2021. These QA/QC samples were analyzed for the same constituents as the groundwater samples. Based on review of the laboratory-provided QC data and EPA guidance recommendations, the data for this sampling event were determined to meet the data quality objectives for the project with the provided data qualifiers. It is noted that due to laboratory blank contamination, radium analysis for several samples were flagged as estimated. A copy of the data validation record is presented in Appendix B.

6.0 STATISTICAL EVALUATION OF GROUNDWATER DATA

Per 40 CFR Part 257.94(e)(1), the LVWSP transitioned into the AMP in March 2018. Consistent with the CCR Rule requirements the second semi-annual 2020 event data and the 2021 monitoring results were compared to Facility background concentrations and GWPS established on October 17, 2018, as updated.

6.1 2nd Semi-Annual 2020 Assessment Monitoring Data Evaluations

The results from the Unit's monitoring wells were compared to established background concentrations and SSIs were identified over the Unit's background for the second semi-annual 2020 AMP sampling event. Concentrations above background are identified in Table 2.

The following potential GWPS exceedance was identified for the 2nd semi-annual 2020 AMP sampling event based on a value-to-standard evaluation.

Constituent	October 17, 2018 Background Based CCR GWPS (ug/L)	Assessment Monitoring Well	2SA2020 Concentration
Cobalt (µg/L)	34	OW-2A	72
		OW-12	39

Note: ug/L = Microgram per liter

Pursuant to 40 CFR Subpart 257.95(e,f,g), the second semi-annual 2020 results were evaluated against GWPS. Based on the potential value-to-standard exceedance, the cobalt detections at OW-2A and OW-12 were statistically evaluated with a lower confidence limit (LCL) statistical approach. As presented in Appendix C, the LCL calculated for OW-2A was 8.47 ug/L and the LCL calculated for OW-12 was 11.68 ug/L. Both of the LCLs are less than the GWPS and therefore, the potential cobalt GWPS exceedances for cobalt have been refuted.

6.2 1st Semi-Annual 2021 Assessment Monitoring Data Evaluations

Pursuant to 40 CFR Subpart 257.95(e,f,g), the results from the Unit's monitoring wells were compared to updated background concentrations and SSIs were identified over the Unit's background for the first semi-annual AMP sampling event. Concentrations above background are identified in Table 3.

There were no GWPS exceedances identified for the first semi-annual 2021 AMP sampling event.

6.3 2nd Semi-Annual 2021 Assessment Monitoring Data Evaluations

The data for the second semi-annual 2021 AMP sampling event are being evaluated against the GWPS for the LVWSP and the Facility background concentrations in accordance with the CCR Rule timeframes. The results from those evaluations will be presented in the *2022 Annual Groundwater Monitoring and Corrective Action Report*.

7.0 CONCLUSIONS

7.1 Findings

The first semi-annual 2021 AMP compliance sampling event was completed on April 29-30, 2021, with sample analyses completed on June 11, 2021 (revised June 18, 2021). The second semi-annual 2021 AMP compliance sampling event was completed on November 4, 2021, with sample analyses complete on December 15, 2021. These groundwater sampling and analysis activities were conducted in general accordance with the requirements of the LVWSP's GMP for the CCR network.

Comparisons of the laboratory analytical results from the 2020 second semi-annual and 2021 first semi-annual sampling events to established GWPS identified no statistically confirmed GWPS exceedances. Monitoring results from the second semi-annual 2021 AMP event conducted in November 2021 are being evaluated against site-specific GWPS in accordance with the applicable CCR Rule timeframe.

7.2 Planned Activities

Based on the results presented herein, Dominion Energy intends to complete the required data evaluations for the second semi-annual 2021 AMP sampling event within the CCR Rule prescribed timeframes and continue with semi-annual groundwater monitoring activities in 2022 that are consistent with the provisions in the CCR Rule [Part 257.95 *et. seq*] and the LVWSP's GMP.

8.0 REFERENCES

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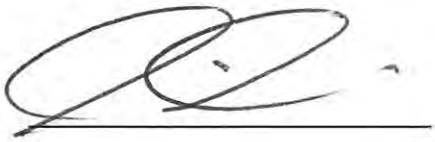
9.0 SIGNATURE SECTION

This *2021 Annual CCR Groundwater Monitoring and Corrective Action Report* (Report) has been prepared by Golder Associates USA Inc. on the behalf of Virginia Electric and Power Company d/b/a Dominion Energy Virginia (Dominion Energy) for the Mt. Storm Power Station Low Volume Waste Settling Ponds. This Report satisfies the reporting requirements specified in Title 40 Code of Federal Regulations (CFR) Part 257.90(e) *et seq.* [Disposal of Coal Combustion Residuals (CCR) from Electric Utilities (CCR Rule; Federal Register Vol. 80, No. 74, 21302-21501 on April 17, 2015, as amended)].

Signature

Name & Title



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https://golderassociates.sharepoint.com/sites/142954/project files/6 deliverables/lvwsp/2022-1-xx amr/2022-01-31 mount storm lvwsp ccr amr.docx

TABLES

TABLE 1

SUMMARY OF HISTORICAL CCR STATIC WATER LEVEL DATA

MOUNT STORM POWER STATION - LOW VOLUME WASTE SETTLING PONDS

Monitoring Well	Top of Casing Elevation (ft ASML)	Date	Depth to Water (feet)	Static Water Level Elevation (ft AMSL)
OW-2	3257.85	11/03/2015	12.59	3245.26
		02/01/2016	11.70	3246.15
		05/02/2016	10.99	3246.86
		08/23/2016	10.91	3246.94
		11/28/2016	12.44	3245.41
		02/13/2017	11.69	3246.16
		05/16/2017	11.62	3246.23
		08/15/2017	14.03	3243.82
		10/10/2017	14.17	3243.68
		03/19/2018	11.38	3246.47
		06/04/2018	10.04	3247.81
		10/30/2018	13.71	3244.14
		04/17/2019	11.78	3246.07
		10/30/2019	12.70	3245.15
		04/15/2020	11.20	3246.65
		10/12/2020	12.32	3245.53
		04/28/2021	10.88	3246.97
		11/04/2021	11.50	3246.35
OW-2A	3257.41	11/03/2015	12.77	3244.64
		02/01/2016	13.54	3243.87
		05/02/2016	12.46	3244.95
		08/23/2016	13.54	3243.87
		11/28/2016	12.79	3244.62
		02/13/2017	11.79	3245.62
		05/16/2017	12.14	3245.27
		08/15/2017	14.19	3243.22
		10/10/2017	14.01	3243.40
		03/19/2018	13.21	3244.20
		06/05/2018	11.96	3245.45
		10/31/2018	16.19	3241.22
		04/17/2019	12.41	3245.00
		10/30/2019	13.72	3243.69
		04/15/2020	12.52	3244.89
		10/12/2020	13.62	3243.79
		04/28/2021	12.70	3244.71
		11/04/2021	11.93	3245.48

TABLE 1

SUMMARY OF HISTORICAL CCR STATIC WATER LEVEL DATA

MOUNT STORM POWER STATION - LOW VOLUME WASTE SETTLING PONDS

Monitoring Well	Top of Casing Elevation (ft ASML)	Date	Depth to Water (feet)	Static Water Level Elevation (ft AMSL)
OW-4	3258.73	11/03/2015	14.25	3244.48
		02/01/2016	15.52	3243.21
		05/02/2016	14.10	3244.63
		08/23/2016	15.01	3243.72
		11/28/2016	14.47	3244.26
		02/13/2017	12.87	3245.86
		05/16/2017	13.38	3245.35
		08/15/2017	14.89	3243.84
		10/10/2017	14.69	3244.04
		03/19/2018	14.22	3244.51
		06/04/2018	12.57	3246.16
		10/30/2018	13.04	3245.69
		04/17/2019	13.43	3245.30
		10/30/2019	14.59	3244.14
		04/15/2020	13.01	3245.72
		10/12/2020	14.33	3244.40
		04/28/2021	12.79	3245.94
		11/04/2021	11.80	3246.93
OW-4A	3257.40	11/03/2015	12.76	3244.64
		02/01/2016	14.00	3243.40
		05/02/2016	12.57	3244.83
		08/23/2016	13.53	3243.87
		11/28/2016	12.97	3244.43
		02/13/2017	11.71	3245.69
		05/16/2017	11.89	3245.51
		08/15/2017	13.40	3244.00
		10/10/2017	13.23	3244.17
		03/20/2018	13.01	3244.39
		06/05/2018	11.39	3246.01
		10/31/2018	11.84	3245.56
		04/17/2019	12.25	3245.15
		10/30/2019	13.41	3243.99
		04/15/2020	11.81	3245.59
		10/12/2020	13.13	3244.27
		04/28/2021	11.61	3245.79
		11/04/2021	10.63	3246.77

TABLE 1

SUMMARY OF HISTORICAL CCR STATIC WATER LEVEL DATA

MOUNT STORM POWER STATION - LOW VOLUME WASTE SETTLING PONDS

Monitoring Well	Top of Casing Elevation (ft ASML)	Date	Depth to Water (feet)	Static Water Level Elevation (ft AMSL)
OW-6A	3251.88	11/03/2015	6.21	3245.67
		02/01/2016	6.16	3245.72
		05/02/2016	5.60	3246.28
		08/23/2016	6.01	3245.87
		11/28/2016	6.45	3245.43
		02/13/2017	5.38	3246.50
		05/16/2017	5.47	3246.41
		08/15/2017	10.11	3241.77
		10/10/2017	8.95	3242.93
		03/19/2018	6.50	3245.38
		06/04/2018	4.65	3247.23
		10/30/2018	8.71	3243.17
		04/17/2019	6.33	3245.55
	3251.84	10/30/2019	6.86	3244.98
		04/15/2020	5.72	3246.12
		10/12/2020	7.10	3244.74
		04/28/2021	6.46	3245.38
		11/04/2021	6.98	3244.86
OW-6B	3252.68	11/03/2015	7.67	3245.01
		02/01/2016	8.28	3244.40
		05/02/2016	7.34	3245.34
		08/23/2016	8.33	3244.35
		11/28/2016	7.67	3245.01
		02/13/2017	6.98	3245.70
		05/16/2017	7.11	3245.57
		08/15/2017	9.65	3243.03
		10/10/2017	9.17	3243.51
		03/19/2018	8.05	3244.63
		06/04/2018	6.78	3245.90
		10/30/2018	9.97	3242.71
		04/17/2019	7.73	3244.95
		10/30/2019	8.65	3244.03
		04/15/2020	7.37	3245.31
		10/12/2020	8.51	3244.17
		04/29/2021	7.59	3245.09
		11/04/2021	6.78	3245.90

TABLE 1

SUMMARY OF HISTORICAL CCR STATIC WATER LEVEL DATA

MOUNT STORM POWER STATION - LOW VOLUME WASTE SETTLING PONDS

Monitoring Well	Top of Casing Elevation (ft ASML)	Date	Depth to Water (feet)	Static Water Level Elevation (ft AMSL)
OW-7A	3288.04	11/03/2015	34.01	3254.03
		02/01/2016	32.93	3255.11
		05/02/2016	33.03	3255.01
		08/23/2016	33.64	3254.40
		11/28/2016	34.10	3253.94
		02/13/2017	33.10	3254.94
		05/16/2017	36.99	3251.05
		08/15/2017	37.10	3250.94
		10/10/2017	37.11	3250.93
		03/19/2018	36.08	3251.96
		06/05/2018	35.92	3252.12
		10/31/2018	36.85	3251.19
		04/17/2019	36.93	3251.11
		10/30/2019	37.62	3250.42
		04/15/2020	36.45	3251.59
		10/12/2020	37.30	3250.74
		04/28/2021	36.57	3251.47
		11/04/2021	37.27	3250.77
OW-7B	3289.31	11/03/2015	34.43	3254.88
		02/01/2016	32.66	3256.65
		05/02/2016	32.50	3256.81
		08/23/2016	33.65	3255.66
		11/28/2016	34.90	3254.41
		02/13/2017	32.20	3257.11
		05/16/2017	35.24	3254.07
		08/15/2017	36.95	3252.36
		10/10/2017	37.29	3252.02
		03/19/2018	35.41	3253.90
		06/04/2018	35.18	3254.13
		10/30/2018	36.10	3253.21
		04/17/2019	36.04	3253.27
		10/30/2019	37.12	3252.19
		04/15/2020	35.67	3253.64
		10/12/2020	36.55	3252.76
		04/28/2021	35.08	3254.23
		11/04/2021	35.71	3253.60

TABLE 1

SUMMARY OF HISTORICAL CCR STATIC WATER LEVEL DATA

MOUNT STORM POWER STATION - LOW VOLUME WASTE SETTLING PONDS

Monitoring Well	Top of Casing Elevation (ft ASML)	Date	Depth to Water (feet)	Static Water Level Elevation (ft AMSL)
OW-8	3305.03	11/03/2015	44.36	3260.67
		02/01/2016	42.80	3262.23
		05/02/2016	42.58	3262.45
		08/23/2016	43.64	3261.39
		11/28/2016	44.96	3260.07
		02/13/2017	41.16	3263.87
		05/16/2017	41.09	3263.94
		08/15/2017	43.32	3261.71
		10/10/2017	44.85	3260.18
		03/19/2018	41.75	3263.28
		06/05/2018	42.24	3262.79
		10/30/2018	44.93	3260.10
		04/17/2019	45.23	3259.80
		10/30/2019	48.49	3256.54
		04/15/2020	43.49	3261.54
		10/12/2020	46.94	3258.09
		04/28/2021	44.44	3260.59
		11/04/2021	45.03	3260.00
OW-8A	3305.40	11/03/2015	55.98	3249.42
		02/01/2016	55.46	3249.94
		05/02/2016	54.15	3251.25
		08/23/2016	54.43	3250.97
		11/28/2016	55.55	3249.85
		02/13/2017	54.06	3251.34
		05/16/2017	55.72	3249.68
		08/15/2017	57.24	3248.16
		10/10/2017	58.01	3247.39
		03/19/2018	56.45	3248.95
		06/04/2018	55.91	3249.49
		10/30/2018	58.23	3247.17
		04/17/2019	58.36	3247.04
		10/30/2019	59.53	3245.87
		04/15/2020	57.89	3247.51
		10/12/2020	59.92	3245.48
		04/28/2021	57.50	3247.90
		11/04/2021	58.16	3247.24

TABLE 1

SUMMARY OF HISTORICAL CCR STATIC WATER LEVEL DATA

MOUNT STORM POWER STATION - LOW VOLUME WASTE SETTLING PONDS

Monitoring Well	Top of Casing Elevation (ft ASML)	Date	Depth to Water (feet)	Static Water Level Elevation (ft AMSL)
OW-9A	3257.56	11/03/2015	12.26	3245.30
		02/01/2016	12.72	3244.84
		05/02/2016	12.19	3245.37
		08/23/2016	12.53	3245.03
		11/28/2016	13.13	3244.43
		02/13/2017	11.89	3245.67
		05/16/2017	Dry	--
		08/15/2017	Dry	--
		10/10/2017	Dry	--
		03/19/2018	13.49	3244.07
		06/04/2018	12.44	3245.22
		10/30/2018	13.33	3244.33
		04/17/2019	>13.24	<3244.32
		10/30/2019	>13.24	<3244.32
		04/15/2020	>13.22	<3244.34
		10/12/2020	>14.23	<3243.33
		04/28/2021	>13.23	<3244.33
		11/04/2021	12.79	3244.77
OW-9B	3257.57	11/03/2015	12.30	3245.27
		02/01/2016	13.42	3244.15
		05/02/2016	12.15	3245.42
		08/23/2016	13.16	3244.41
		11/28/2016	12.77	3244.80
		02/13/2017	11.42	3246.15
		05/16/2017	11.68	3245.89
		08/15/2017	13.35	3244.22
		10/10/2017	13.21	3244.36
		03/19/2018	12.20	3245.37
		06/04/2018	10.83	3246.74
		10/30/2018	11.55	3246.02
		04/17/2019	12.11	3245.46
		10/30/2019	13.06	3244.51
		04/15/2020	11.47	3246.10
		10/12/2020	13.05	3244.52
		04/28/2021	20.52	3237.05
		11/04/2021	10.73	3246.84

TABLE 1

SUMMARY OF HISTORICAL CCR STATIC WATER LEVEL DATA

MOUNT STORM POWER STATION - LOW VOLUME WASTE SETTLING PONDS

Monitoring Well	Top of Casing Elevation (ft ASML)	Date	Depth to Water (feet)	Static Water Level Elevation (ft AMSL)
OW-10	3256.86	11/03/2015	12.24	3244.62
		02/01/2016	13.38	3243.48
		05/02/2016	11.99	3244.87
		08/23/2016	12.99	3243.87
		11/28/2016	12.35	3244.51
		02/13/2017	11.18	3245.68
		05/16/2017	11.37	3245.49
		08/15/2017	12.93	3243.93
		10/10/2017	12.77	3244.09
		03/19/2018	12.49	3244.37
		06/05/2018	10.90	3245.96
		10/31/2018	12.60	3244.26
		04/17/2019	11.75	3245.11
		10/30/2019	12.88	3243.98
		04/15/2020	11.39	3245.47
		10/12/2020	12.65	3244.21
		04/28/2021	11.23	3245.63
		11/04/2021	10.25	3246.61
OW-11	3260.48	11/03/2015	15.30	3245.18
		02/01/2016	15.70	3244.78
		05/02/2016	15.14	3245.34
		08/23/2016	15.75	3244.73
		11/28/2016	16.10	3244.38
		02/13/2017	14.90	3245.58
		05/16/2017	22.27	3238.21
		08/15/2017	21.83	3238.65
		10/10/2017	19.43	3241.05
		03/19/2018	16.81	3243.67
		06/04/2018	15.70	3244.78
		10/30/2018	16.71	3243.77
		04/17/2019	17.03	3243.45
		10/30/2019	17.27	3243.21
		04/15/2020	16.69	3243.79
		10/12/2020	17.14	3243.34
		04/28/2021	15.71	3244.77
		11/04/2021	16.06	3244.42

TABLE 1

SUMMARY OF HISTORICAL CCR STATIC WATER LEVEL DATA

MOUNT STORM POWER STATION - LOW VOLUME WASTE SETTLING PONDS

Monitoring Well	Top of Casing Elevation (ft ASML)	Date	Depth to Water (feet)	Static Water Level Elevation (ft AMSL)
OW-12	3270.00	11/28/2016	25.20	3244.80
		02/13/2017	23.81	3246.19
		05/16/2017	24.05	3245.95
		08/15/2017	25.65	3244.35
		10/10/2017	25.53	3244.47
		03/20/2018	25.29	3244.71
		06/05/2018	23.89	3246.11
		10/31/2018	24.94	3245.06
		04/17/2019	25.42	3244.58
		10/30/2019	25.85	3244.15
		04/15/2020	25.02	3244.98
		10/12/2020	26.10	3243.90
		04/28/2021	25.00	3245.00
		11/04/2021	24.33	3245.67
OW-13	3260.47	02/13/2017	14.83	3245.64
		05/16/2017	21.19	3239.28
		08/15/2017	18.88	3241.59
		10/10/2017	18.31	3242.16
		03/20/2018	13.89	3246.58
		06/05/2018	13.51	3246.96
		10/31/2018	16.10	3244.37
		04/17/2019	16.31	3244.16
		10/30/2019	16.75	3243.72
		04/15/2020	15.75	3244.72
		10/12/2020	16.62	3243.85
		04/28/2021	16.12	3244.35
		11/04/2021	15.59	3244.88
OW-14	3261.61	10/30/2018	17.75	3243.86
		04/17/2019	18.00	3243.61
		10/30/2019	18.32	3243.29
		04/15/2020	17.75	3243.86
		10/12/2020	18.37	3243.24
		04/28/2021	17.90	3243.71
		11/04/2021	17.22	3244.39
OW-15	3254.08	10/30/2018	8.53	3245.55
		04/17/2019	8.53	3245.55
		10/30/2019	10.12	3243.96
		04/15/2020	8.54	3245.54
		10/12/2020	9.87	3244.21
		04/29/2021	8.98	3245.10
		11/04/2021	7.42	3246.66

TABLE 1

SUMMARY OF HISTORICAL CCR STATIC WATER LEVEL DATA

MOUNT STORM POWER STATION - LOW VOLUME WASTE SETTLING PONDS

Monitoring Well	Top of Casing Elevation (ft ASML)	Date	Depth to Water (feet)	Static Water Level Elevation (ft AMSL)
OW-16A	3262.91	10/30/2018	24.21	3238.70
		04/17/2019	20.50	3242.41
	3264.07	10/30/2019	22.23	3241.84
		04/15/2020	20.74	3243.33
		10/12/2020	22.15	3241.92
		04/28/2021	21.72	3242.35
		11/04/2021	21.41	3242.66
OW-17A	3262.83	10/30/2018	24.20	3238.63
		04/17/2019	20.48	3242.35
	3264.42	10/30/2019	22.58	3241.84
		04/15/2020	22.07	3242.35
		10/12/2020	22.52	3241.90
		04/28/2021	22.07	3242.35
		11/04/2021	20.78	3243.64
OW-18A	3263.25	10/30/2018	21.09	3242.16
		04/17/2019	20.71	3242.54
	3264.48	10/30/2019	22.23	3242.25
		04/15/2020	21.78	3242.70
		10/12/2020	22.04	3242.44
		04/28/2021	21.73	3242.75
		11/04/2021	21.56	3242.92
OW-19	3269.70	10/30/2018	28.02	3241.68
		04/17/2019	27.98	3241.72
		10/30/2019	27.98	3241.72
		04/15/2020	27.70	3242.00
		10/12/2020	27.96	3241.74
		04/28/2021	27.75	3241.95
		11/04/2021	27.69	3242.01

Note: ft AMSL = feet Above Mean Sea Level

< = Water level elevation is below the top of pump

Table 2
Summary of 2nd Semi-Annual 2020 Assessment Monitoring Program Event Data (October 2020)
Low Volume Waste Settling Ponds, Mount Storm Power Station

				Upgradient Wells								Downgradient Wells																Field Quality Control							
		Sample ID:		OW-7A				OW-8				OW-2A				OW-4A				OW-10				OW-12				OW-13				OW-10 - DUP				Field Blank			
		Sample Date:		10/14/2020				10/14/2020				10/14/2020				10/14/2020				10/14/2020				10/14/2020				10/14/2020				10/14/2020				10/14/2020			
Parameter Name	**Units**	**CCR Site-Specific BKGD**	**CCR GWPS**	**Result**	**Qual**	**MDL**	**RL**	**Result**	**Qual**	**MDL**	**RL**	**Result**	**Qual**	**MDL**	**RL**	**Result**	**Qual**	**MDL**	**RL**	**Result**	**Qual**	**MDL**	**RL**	**Result**	**Qual**	**MDL**	**RL**	**Result**	**Qual**	**MDL**	**RL**	**Result**	**Qual**	**MDL**	**RL**	**Result**	**Qual**	**MDL**	**RL**
CCR Appendix III Constituents																																							
Boron	mg/L	0.170	--	< 0.023		0.023	0.1	**0.055**	J	0.023	0.1	**0.11**		0.023	0.1	**0.041**	J	0.023	0.1	**0.059**	J	0.023	0.1	**0.36**		0.023	0.1	< 0.023		0.023	0.1	**0.059**	J	0.023	0.1	< 0.023		0.023	0.1
Calcium	mg/L	460	--	**41**		0.58	1	**380**		0.58	1	**100**		0.58	1	**22**		0.58	1	**45**		0.58	1	**140**		0.58	1	**27**		0.58	1	**45**		0.58	1	< 0.58		0.58	1
Chloride	mg/L	208.1	--	**91**		0.28	1	**230**		2.8	10	**19**		0.28	1	**5.2**		0.28	1	**7.1**		0.28	1	**140**		0.28	1	**23**		0.28	1	**7.2**		0.28	1	< 0.28		0.28	1
Fluoride	mg/L	0.540	4.0	**0.14**		0.024	0.05	**0.066**		0.024	0.05	**0.14**		0.024	0.05	**0.09**		0.024	0.05	**0.21**		0.024	0.05	**0.083**		0.024	0.05	**0.047**	J	0.024	0.05	**0.2**		0.024	0.05	< 0.024		0.024	0.05
pH	SU	5.77-7.17	--	6.04		0.01	0.01	6.24		0.01	0.01	6.51		0.01	0.01	6.71		0.01	0.01	6.48		0.01	0.01	5.98		0.01	0.01	6.20		0.01	0.01	--		--	--	--		--	--
Sulfate	mg/L	1000	--	**11**		0.35	1	**850**		3.5	10	**110**		0.35	1	**39**		0.35	1	**1.3**		0.35	1	**420**		1.7	5	**1.9**		0.35	1	**1.3**		0.35	1	< 0.35		0.35	1
Total Dissolved Solids	mg/L	1819	--	**250**		10	10	**400**		10	10	**410**		10	10	**120**		10	10	**170**		10	10	**900**		10	10	**390**		10	10	**200**		10	10	< 10		10	10
Detected CCR Appendix IV Constituents																																							
Arsenic	ug/L	QL (5)	10	< 0.75		0.75	5.0	**0.89**	J	0.75	5.0	**1.5**	J	0.75	5.0	**2.8**	J	0.75	5.0	< 0.75		0.75	5.0	**4.9**	J	0.75	5.0	**6.3**		0.75	5.0	< 0.75		0.75	5.0	< 0.75		0.75	5.0
Barium	ug/L	370	2,000	**270**		2.2	5.0	**9.4**		2.2	5.0	**220**		2.2	5.0	**76**		2.2	5.0	**330**		2.2	5.0	**76**		2.2	5.0	**160**		2.2	5.0	**320**		2.2	5.0	< 2.2		2.2	5.0
Beryllium	ug/L	QL (4)	4	< 0.31		0.31	1.0	< 0.31		0.31	1.0	< 0.31		0.31	1.0	< 0.31		0.31	1.0	< 0.31		0.31	1.0	< 0.31		0.31	1.0	< 0.31		0.31	1.0	< 0.31		0.31	1.0	< 0.31		0.31	1.0
Cadmium	ug/L	QL (3)	5	< 0.20		0.20	1.0	< 0.20		0.20	1.0	**1.6**		0.20	1.0	< 0.20		0.20	1.0	< 0.20		0.20	1.0	< 0.20		0.20	1.0	< 0.20		0.20	1.0	< 0.20		0.20	1.0	< 0.20		0.20	1.0
Chromium	ug/L	11	100	< 0.98		0.98	2.0	< 0.98		0.98	2.0	< 0.98		0.98	2.0	**1.2**	J	0.98	2.0	< 0.98		0.98	2.0	< 0.98		0.98	2.0	**5.6**		0.98	2.0	< 0.98		0.98	2.0	< 0.98		0.98	2.0
Cobalt	ug/L	34	34	**3.6**		0.19	1.0	**28**		0.19	1.0	**72**		0.19	1.0	**0.57**	J	0.19	1.0	**0.35**	J	0.19	1.0	**39**		0.19	1.0	**5.6**		0.19	1.0	**0.22**	J	0.19	1.0	< 0.19		0.19	1.0
Fluoride	mg/L	0.540	4.0	**0.14**		0.024	0.05	**0.066**		0.024	0.05	**0.14**		0.024	0.05	**0.09**		0.024	0.05	**0.21**		0.024	0.05	**0.083**		0.024	0.05	**0.047**	J	0.024	0.05	**0.2**		0.024	0.05	< 0.024		0.024	0.05
Lead	ug/L	QL (10)	15	**0.67**	J	0.45	1.0	< 0.45		0.45	1.0	**0.46**	J	0.45	1.0	**0.46**	J	0.45	1.0	< 0.45		0.45	1.0	< 0.45		0.45	1.0	**0.86**	J	0.45	1.0	< 0.45		0.45	1.0	< 0.45		0.45	1.0
Lithium	ug/L	QL (40)	40	**13**		1.7	8.0	**7.2**	J	1.7	8.0	**3.1**	J	1.7	8.0	< 1.7		1.7	8.0	**7.9**	J	1.7	8.0	**4.3**	J	1.7	8.0	< 1.7		1.7	8.0	**8.6**		1.7	8.0	< 1.7		1.7	8.0
Mercury	ug/L	QL (0.2)	--	< 0.13		0.13	0.20	< 0.13		0.13	0.20	< 0.13		0.13	0.20	< 0.13		0.13	0.20	< 0.13		0.13	0.20	< 0.13		0.13	0.20	< 0.13		0.13	0.20	< 0.13		0.13	0.20	< 0.13		0.13	0.20
Molybdenum	ug/L	QL (50)	100	< 1.1		1.1	10	< 1.1		1.1	10	**7.4**	J	1.1	10	**1.8**	J	1.1	10	< 1.1		1.1	10	**7.8**	J	1.1	10	< 1.1		1.1	10	< 1.1		1.1	10	< 1.1		1.1	10
Selenium	ug/L	QL (5)	50	< 0.89		0.89	5.0	< 0.89		0.89	5.0	< 0.89		0.89	5.0	< 0.89		0.89	5.0	< 0.89		0.89	5.0	< 0.89		0.89	5.0	**1.0**	J	0.89	5.0	< 0.89		0.89	5.0	< 0.89		0.89	5.0
Thallium	ug/L	QL (1)	2	< 0.20		0.20	1.0	< 0.20		0.20	1.0	< 0.20		0.20	1.0	< 0.20		0.20	1.0	< 0.20		0.20	1.0	< 0.20		0.20	1.0	< 0.20		0.20	1.0	< 0.20		0.20	1.0	< 0.20		0.20	1.0
Radium 226 and 228 (combined)	pCi/L	QL (5)	5	-0.117	U	--	--	0.151	U	--	--	**1.63**		--	--	**0.523**		--	--	**0.408**		--	--	**0.552**		--	--	**1.48**		--	--	**0.620**		--	--	0.273	U	--	--
Field Parameters																																							
Conductivity	uS/cm	--	--	461.6		0.1	0.1	2360		0.1	0.1	710		0.1	0.1	196.0		0.1	0.1	413.5		0.1	0.1	1281		0.1	0.1	775		0.1	0.1	--		--	--	--		--	--
Depth to Water*	ft btoc	--	--	37.30		0.01	0.01	46.94		0.01	0.01	13.62		0.01	0.01	13.13		0.01	0.01	12.65		0.01	0.01	26.10		0.01	0.01	16.62		0.01	0.01	--		--	--	--		--	--
Dissolved Oxygen	mg/L	--	--	1.83		0.01	0.01	2.32		0.01	0.01	0.74		0.01	0.01	2.26		0.01	0.01	1.60		0.01	0.01	0.54		0.01	0.01	0.48		0.01	0.01	--		--	--	--		--	--
Groundwater Elevation*	ft msl	--	--	3250.74		0.01	0.01	3258.09		0.01	0.01	3243.79		0.01	0.01	3244.27		0.01	0.01	3244.21		0.01	0.01	3243.90		0.01	0.01	3243.85		0.01	0.01	--		--	--	--		--	--
Oxidation Reduction Potential	millivolts	--	--	22.7		0.1	0.1	-17.9		0.1	0.1	-50.4		0.1	0.1	-68.1		0.1	0.1	-83.8		0.1	0.1	10.8		0.1	0.1	-88.8		0.1	0.1	--		--	--	--		--	--
Temperature	C	--	--	10.8		0.01	0.01	12.4		0.01	0.01	13.7		0.01	0.01	18.7		0.01	0.01	15.5		0.01	0.01	15.7		0.01	0.01	15.2		0.01	0.01	--		--	--	--		--	--
Turbidity	NTU	--	--	12.23		0.1	0.1	5.63		0.1	0.1	10.8		0.1	0.1	21.5		0.1	0.1	10.9		0.1	0.1	10.51		0.1	0.1	28.59		0.1	0.1	--		--	--	--		--	--

Notes:
BKGD = Background
CCR = Coal Combustion Residuals
GWPS = Groundwater Protection Standards
QL = Quantitation Limit
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
ft btoc = feet below top of casing
ft msl = feet above mean sea level
Bold font = Detected laboratory constituent
* - Groundwater Elevation data collected on October 12, 2020

Qualifiers (Qual):
J = Estimated Result
U = Radiological sample not detected above the Miniumum Detection Concentration

= Concentration greater than site specific background

= Concentration greater than CCR GWPS and site background

Table 3
Summary of 1st Semi-Annual 2021 Assessment Monitoring Program Event Data (April 2021)
Low Volume Waste Settling Ponds, Mount Storm Power Station

				Upgradient Wells								Downgradient Wells																Field Quality Control							
			Sample ID:	OW-7A				OW-8				OW-2A				OW-4A				OW-10				OW-12				OW-13				OW-4A DUP				Field Blank			
			Sample Date:	4/29/2021				4/29/2021				4/29/2021				4/29/2021				4/30/2021				4/29/2021				4/29/2021				4/29/2021				4/29/2021			
Parameter Name	**Units**	**CCR Site-Specific BKGD**	**CCR GWPS**	**Result**	**Qual**	**MDL**	**RL**	**Result**	**Qual**	**MDL**	**RL**	**Result**	**Qual**	**MDL**	**RL**	**Result**	**Qual**	**MDL**	**RL**	**Result**	**Qual**	**MDL**	**RL**	**Result**	**Qual**	**MDL**	**RL**	**Result**	**Qual**	**MDL**	**RL**	**Result**	**Qual**	**MDL**	**RL**	**Result**	**Qual**	**MDL**	**RL**
CCR Appendix III Constituents																																					
Boron	mg/L	170	--	< 0.023	U	0.023	0.10	**0.10**		0.023	0.10	**0.081**	J	0.023	0.10	**0.042**	J	0.023	0.10	**0.049**	J	0.023	0.10	**0.28**		0.023	0.10	< 0.023	U	0.023	0.10	**0.040**	J	0.023	0.10	< 0.023	U	0.023	0.10
Calcium	mg/L	460,000	--	**42**		0.58	1.0	**390**		0.58	1.0	**110**		0.58	1.0	**22**		0.58	1.0	**43**		0.58	1.0	**110**		0.58	1.0	**17**		0.58	1.0	**22**		0.58	1.0	< 0.58	U	0.58	1.0
Chloride	mg/L	208.1	--	**93**		0.28	1.0	**260**		2.8	10	**26**		0.28	1.0	**5.2**		0.28	1.0	**7.7**		0.28	1.0	**170**		0.28	1.0	**24**		0.28	1.0	**5.0**		0.28	1.0	< 0.28	U	0.28	1.0
Fluoride	mg/L	0.540	4.0	**0.17**		0.024	0.050	**0.12**		0.024	0.050	**0.24**		0.024	0.050	**0.088**		0.024	0.050	**0.26**		0.024	0.050	**0.13**		0.024	0.050	**0.059**		0.024	0.050	**0.082**		0.024	0.050	< 0.024	U	0.024	0.050
pH	SU	5.77-7.17	--	6.01		0.01	0.01	6.28		0.01	0.01	6.54		0.01	0.01	6.71		0.01	0.01	6.35		0.01	0.01	5.97		0.01	0.01	6.02		0.01	0.01	--		--	--	--		--	--
Sulfate	mg/L	1000	--	**9.9**		0.35	1.0	**930**		3.5	10	**160**		0.35	1.0	**46**		0.35	1.0	**9.1**		0.35	1.0	**280**		1.7	5.0	**19**		0.35	1.0	**46**		0.35	1.0	< 0.35	U	0.35	1.0
Total Dissolved Solids	mg/L	1819	--	**230**		10	10	**1800**		10	10	**480**		10	10	**100**		10	10	**170**		10	10	**720**		10	10	**650**		10	10	**100**		10	10	< 10	U	10	10
CCR Appendix IV Constituents																																					
Antimony	ug/L	QL (2)	--	< 0.57	U	0.57	2.0	< 0.57	U	0.57	2.0	< 0.57	U	0.57	2.0	< 0.57	U	0.57	2.0	< 0.57	U	0.57	2.0	< 0.57	U	0.57	2.0	< 0.57	U	0.57	2.0	< 0.57	U	0.57	2.0	< 0.57	U	0.57	2.0
Arsenic	ug/L	QL (5)	10	< 0.75	U	0.75	5.0	< 0.75	U	0.75	5.0	**0.84**	J	0.75	5.0	**1.7**	J	0.75	5.0	< 0.75	U	0.75	5.0	**3.1**	J	0.75	5.0	**6.2**		0.75	5.0	**0.82**	J	0.75	5.0	< 0.75	U	0.75	5.0
Barium	ug/L	370	2,000	**290**		2.2	5.0	**8.7**		2.2	5.0	**250**		2.2	5.0	**78**		2.2	5.0	**270**		2.2	5.0	**59**		2.2	5.0	**170**		2.2	5.0	**70**		2.2	5.0	< 2.2	U	2.2	5.0
Beryllium	ug/L	QL (4)	4	< 0.31	U	0.31	1.0	< 0.31	U	0.31	1.0	< 0.31	U	0.31	1.0	< 0.31	U	0.31	1.0	< 0.31	U	0.31	1.0	**0.46**	J	0.31	1.0	< 0.31	U	0.31	1.0	< 0.31	U	0.31	1.0	< 0.31	U	0.31	1.0
Cadmium	ug/L	QL (3)	5	< 0.20	U	0.20	1.0	< 0.20	U	0.20	1.0	**1.1**		0.20	1.0	< 0.20	U	0.20	1.0	< 0.20	U	0.20	1.0	**0.20**	J	0.20	1.0	< 0.20	U	0.20	1.0	< 0.20	U	0.20	1.0	< 0.20	U	0.20	1.0
Chromium	ug/L	11	100	< 0.98	U	0.98	2.0	< 0.98	U	0.98	2.0	< 0.98	U	0.98	2.0	< 0.98	U	0.98	2.0	< 0.98	U	0.98	2.0	< 0.98	U	0.98	2.0	**6.7**		0.98	2.0	< 0.98	U	0.98	2.0	< 0.98	U	0.98	2.0
Cobalt	ug/L	34	34	**3.1**		0.19	1.0	**32**		0.19	1.0	**25**		0.19	1.0	**0.73**	J	0.19	1.0	< 0.19	U	0.19	1.0	**30**		0.19	1.0	**7.8**		0.19	1.0	**0.62**	J	0.19	1.0	< 0.19	U	0.19	1.0
Fluoride	mg/L	0.540	4.0	**0.17**		0.024	0.050	**0.12**		0.024	0.050	**0.24**		0.024	0.050	**0.088**		0.024	0.050	**0.26**		0.024	0.050	**0.13**		0.024	0.050	**0.059**		0.024	0.050	**0.082**		0.024	0.050	< 0.024	U	0.024	0.050
Lead	ug/L	QL (10)	15	< 0.45	U	0.45	1.0	< 0.45	U	0.45	1.0	**0.47**	J	0.45	1.0	< 0.45	U	0.45	1.0	< 0.45	U	0.45	1.0	< 0.45	U	0.45	1.0	**1.1**		0.45	1.0	< 0.45	U	0.45	1.0	< 0.45	U	0.45	1.0
Lithium	ug/L	QL (40)	40	**16**		1.7	8.0	**12**		1.7	8.0	**8.8**		1.7	8.0	**2.8**	J	1.7	8.0	**7.9**	J	1.7	8.0	**6.1**	J	1.7	8.0	**3.9**	J	1.7	8.0	**2.6**	J	1.7	8.0	< 1.7	U	1.7	8.0
Mercury	ug/L	QL (0.2)	--	< 0.13	U	0.13	0.20	< 0.13	U	0.13	0.20	< 0.13	U	0.13	0.20	< 0.13	U	0.13	0.20	< 0.13	U	0.13	0.20	< 0.13	U	0.13	0.20	< 0.13	U	0.13	0.20	< 0.13	U	0.13	0.20	< 0.13	U	0.13	0.20
Molybdenum	ug/L	QL (50)	100	< 1.1	U	1.1	10	< 1.1	U	1.1	10	**3.5**	J	1.1	10	< 1.1	U	1.1	10	< 1.1	U	1.1	10	**8.5**	J	1.1	10	< 1.1	U	1.1	10	< 1.1	U	1.1	10	< 1.1	U	1.1	10
Selenium	ug/L	QL (5)	50	< 0.89	U	0.89	5.0	< 0.89	U	0.89	5.0	< 0.89	U	0.89	5.0	< 0.89	U	0.89	5.0	< 0.89	U	0.89	5.0	< 0.89	U	0.89	5.0	**1.3**	J	0.89	5.0	< 0.89	U	0.89	5.0	< 0.89	U	0.89	5.0
Thallium	ug/L	QL (1)	2	< 0.20	U	0.20	1.0	< 0.20	U	0.20	1.0	< 0.20	U	0.20	1.0	< 0.20	U	0.20	1.0	< 0.20	U	0.20	1.0	**0.35**	J	0.20	1.0	< 0.20	U	0.20	1.0	< 0.20	U	0.20	1.0	< 0.20	U	0.20	1.0
Radium 226 and 228 (combined)	pCi/L	QL (5)	5	0.595	U	--	--	0.575	U	--	--	**1.05**	J	--	--	0.393	U	--	--	0.379	U	--	--	0.463	U	--	--	**1.48**	J	--	--	**0.757**	J	--	--	**0.297**	J	--	--
Field Parameters																																					
Conductivity	uS/cm	--	--	538		0.1	0.1	2446		0.1	0.1	721		0.1	0.1	197.4		0.1	0.1	321.8		0.1	0.1	1092		0.1	0.1	869		0.1	0.1	--		--	--	--		--	--
Depth to Water*	ft btoc	--	--	36.57		0.01	0.01	44.44		0.01	0.01	12.70		0.01	0.01	11.61		0.01	0.01	11.23		0.01	0.01	25.00		0.01	0.01	16.12		0.01	0.01	--		--	--	--		--	--
Dissolved Oxygen	mg/L	--	--	1.17		0.01	0.01	1.36		0.01	0.01	0.16		0.01	0.01	1.12		0.01	0.01	0.99		0.01	0.01	1.28		0.01	0.01	2.57		0.01	0.01	--		--	--	--		--	--
Groundwater Elevation*	ft msl	--	--	3251.47		0.01	0.01	3260.59		0.01	0.01	3244.71		0.01	0.01	3245.79		0.01	0.01	3245.63		0.01	0.01	3245.00		0.01	0.01	3244.35		0.01	0.01	--		--	--	--		--	--
Oxidation Reduction Potential	millivolts	--	--	22.7		0.1	0.1	-11.4		0.1	0.1	-55.4		0.1	0.1	-50.3		0.1	0.1	13.9		0.1	0.1	24.1		0.1	0.1	-17.6		0.1	0.1	--		--	--	--		--	--
Temperature	C	--	--	10.6		0.01	0.01	11.6		0.01	0.01	10.2		0.01	0.01	13.0		0.01	0.01	10.0		0.01	0.01	13.3		0.01	0.01	13.1		0.01	0.01	--		--	--	--		--	--
Turbidity	NTU	--	--	6.0		0.1	0.1	4.73		0.1	0.1	9.9		0.1	0.1	22.32		0.1	0.1	6.42		0.1	0.1	7.66		0.1	0.1	85.12		0.1	0.1	--		--	--	--		--	--

Notes:
BKGD = Background
CCR = Coal Combustion Residuals
GWPS = Groundwater Protection Standards
QL = Quantitation Limit
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
ft btoc = feet below top of casing
ft msl = feet above mean sea level
Bold font = Detected laboratory constituent
* - Groundwater Elevation data collected on April 28-29, 2021

Qualifiers (Qual):
J = Quantitation is approximate due to limitations identified during data validation.
U = The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

= Concentration greater than site specific background

= Concentration greater than CCR GWPS and site background

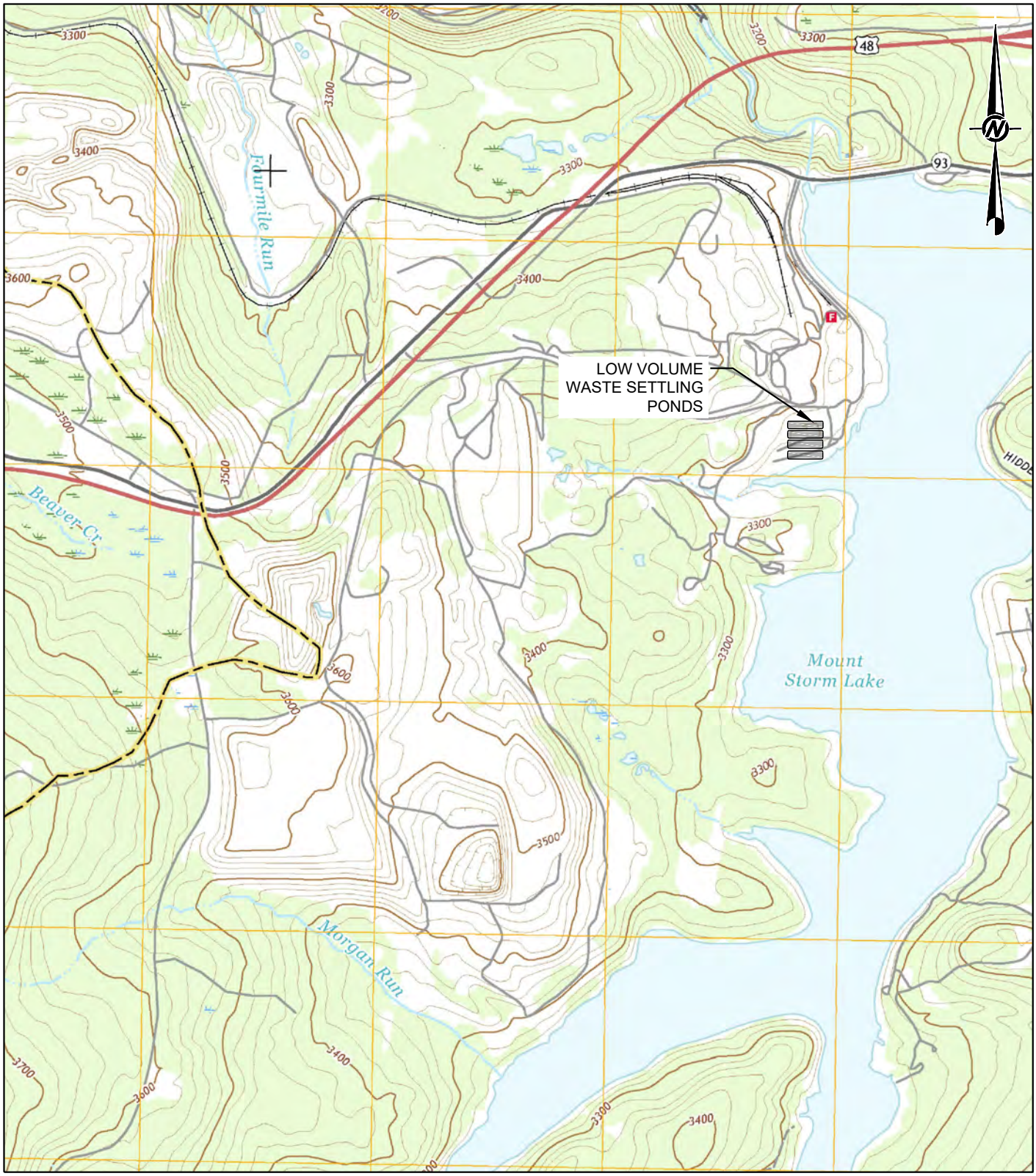
Table 4
Summary of 2nd Semi-Annual 2021 Assessment Monitoring Program Event Data (November 2021)
Low Volume Waste Settling Ponds, Mount Storm Power Station

		Upgradient Wells								Downgradient Wells																Field Quality Control							
Sample ID:		**OW-7A**				**OW-8**				**OW-2A**				**OW-4A**				**OW-10**				**OW-12**				**OW-13**				**OW-4A - DUP**				**Field Blank**			
Sample Date:		**11/4/2021**				**11/4/2021**				**11/4/2021**				**11/4/2021**				**11/4/2021**				**11/4/2021**				**11/4/2021**				**11/4/2021**				**11/4/2021**			
Parameter Name	**Units**	**Result**	**Qual**	**MDL**	**RL**	**Result**	**Qual**	**MDL**	**RL**	**Result**	**Qual**	**MDL**	**RL**	**Result**	**Qual**	**MDL**	**RL**	**Result**	**Qual**	**MDL**	**RL**	**Result**	**Qual**	**MDL**	**RL**	**Result**	**Qual**	**MDL**	**RL**	**Result**	**Qual**	**MDL**	**RL**	**Result**	**Qual**	**MDL**	**RL**
CCR Appendix III Constituents																																					
Boron	mg/L	< 0.057	U	0.057	0.10	**0.10**		0.057	0.10	**0.099**	J	0.057	0.10	**0.085**	J	0.057	0.10	**0.097**	J	0.057	0.10	**0.26**		0.057	0.10	**0.065**	J	0.057	0.10	**0.082**	J	0.057	0.10	< 0.057	U	0.057	0.10
Calcium	mg/L	**43**		0.58	1.0	**310**		0.58	1.0	**59**		0.58	1.0	**24**		0.58	1.0	**39**		0.58	1.0	**88**		0.58	1.0	**20**		0.58	1.0	**24**		0.58	1.0	< 0.58	U	0.58	1.0
Chloride	mg/L	**95**		0.28	1.0	**190**		0.28	1.0	**49**		0.28	1.0	**4.8**		0.28	1.0	**6.7**		0.28	1.0	**110**		0.28	1.0	**23**		0.28	1.0	**5.1**		0.28	1.0	< 0.28	U	0.28	1.0
Fluoride	mg/L	**0.11**		0.024	0.050	**0.050**		0.024	0.050	**0.036**	J	0.024	0.050	**0.074**		0.024	0.050	**0.21**		0.024	0.050	**0.056**		0.024	0.050	**0.044**	J	0.024	0.050	**0.10**		0.024	0.050	< 0.024	U	0.024	0.050
pH	SU	5.57		0.01	0.01	6.36		0.01	0.01	5.72		0.01	0.01	6.38		0.01	0.01	6.51		0.01	0.01	5.46		0.01	0.01	5.91		0.01	0.01	--		0.01	0.01	--		0.01	0.01
Sulfate	mg/L	**9.6**		0.35	1.0	**690**		1.7	5.0	**80**		0.35	1.0	**42**		0.35	1.0	0.35	U	0.35	1.0	**240**		1.7	5.0	0.35	U	0.35	1.0	**46**		0.35	1.0	< 0.35	U	0.35	1.0
Total Dissolved Solids	mg/L	**270**		10	10	**1500**		10	10	**350**		10	10	**110**		10	10	**200**		10	10	**610**		10	10	**380**		10	10	**110**		10	10	< 10	U	10	10
Detected CCR Appendix IV Constituents																																					
Arsenic	ug/L	< 0.75	U	0.75	5.0	< 0.75	U	0.75	5.0	**1.7**	J	0.75	5.0	**1.5**	J	0.75	5.0	1.0	J	0.75	5.0	**2.4**	J	0.75	5.0	**8.0**		0.75	5.0	**1.6**	J	0.75	5.0	< 0.75	U	0.75	5.0
Barium	ug/L	**280**		2.2	5.0	**11**		2.2	5.0	**200**		2.2	5.0	**79**		2.2	5.0	**280**		2.2	5.0	**59**		2.2	5.0	**170**		2.2	5.0	**74**		2.2	5.0	< 2.2	U	2.2	5.0
Beryllium	ug/L	< 0.62	U	0.62	1.0	< 0.62	U	0.62	1.0	< 0.62	U	0.62	1.0	< 0.62	U	0.62	1.0	< 0.62	U	0.62	1.0	< 0.62	U	0.62	1.0	< 0.62	U	0.62	1.0	< 0.62	U	0.62	1.0	< 0.62	U	0.62	1.0
Cadmium	ug/L	< 0.20	U	0.20	1.0	< 0.20	U	0.20	1.0	**3.9**		0.20	1.0	< 0.20	U	0.20	1.0	< 0.20	U	0.20	1.0	< 0.20	U	0.20	1.0	< 0.20	U	0.20	1.0	< 0.20	U	0.20	1.0	< 0.20	U	0.20	1.0
Chromium	ug/L	< 2.5	U	2.5	5.0	< 2.5	U	2.5	5.0	< 2.5	U	2.5	5.0	< 2.5	U	2.5	5.0	< 2.5	U	2.5	5.0	< 2.5	U	2.5	5.0	**5.5**		2.5	5.0	< 2.5	U	2.5	5.0	< 2.5	U	2.5	5.0
Cobalt	ug/L	**3.6**		0.19	1.0	**25**		0.19	1.0	**180**		0.19	1.0	**0.34**	J	0.19	1.0	**0.23**	J	0.19	1.0	**49**		0.19	1.0	**4.1**		0.19	1.0	**0.34**	J	0.19	1.0	< 0.19	U	0.19	1.0
Fluoride	mg/L	**0.11**		0.024	0.050	**0.050**		0.024	0.050	**0.036**	J	0.024	0.050	**0.074**		0.024	0.050	**0.21**		0.024	0.050	**0.056**		0.024	0.050	**0.044**	J	0.024	0.050	**0.10**		0.024	0.050	< 0.024	U	0.024	0.050
Lead	ug/L	< 0.45	U	0.45	1.0	< 0.45	U	0.45	1.0	**0.94**	J	0.45	1.0	< 0.45	U	0.45	1.0	< 0.45	U	0.45	1.0	< 0.45	U	0.45	1.0	**0.56**	J	0.45	1.0	< 0.45	U	0.45	1.0	< 0.45	U	0.45	1.0
Lithium	ug/L	**14**		1.7	8.0	**8.7**		1.7	8.0	**2.6**	J	1.7	8.0	**1.9**	J	1.7	8.0	**8.8**		1.7	8.0	**2.4**	J	1.7	8.0	< 1.7	U	1.7	8.0	**2.3**	J	1.7	8.0	< 1.7	U	1.7	8.0
Molybdenum	ug/L	< 1.1	U	1.1	5.0	< 1.1	U	1.1	5.0	**1.3**	J	1.1	5.0	**1.4**	J	1.1	5.0	< 1.1	U	1.1	5.0	**3.3**	J	1.1	5.0	< 1.1	U	1.1	5.0	**1.5**	J	1.1	5.0	< 1.1	U	1.1	5.0
Selenium	ug/L	< 0.89	U	0.89	5.0	< 0.89	U	0.89	5.0	< 0.89	U	0.89	5.0	< 0.89	U	0.89	5.0	< 0.89	U	0.89	5.0	< 0.89	U	0.89	5.0	**1.2**	J	0.89	5.0	< 0.89	U	0.89	5.0	< 0.89	U	0.89	5.0
Thallium	ug/L	< 0.20	U	0.20	1.0	< 0.20	U	0.20	1.0	< 0.20	U	0.20	1.0	< 0.20	U	0.20	1.0	**0.62**	J	0.20	1.0	< 0.20	U	0.20	1.0	< 0.20	U	0.20	1.0	< 0.20	U	0.20	1.0	< 0.20	U	0.20	1.0
Radium 226 and 228 (combined)	pCi/L	0.879	U	--	--	0.0226	U	--	--	**0.694**	J	--	--	0.424	U	--	--	0.501	U	--	--	0.637	U	--	--	1.19	U	--	--	0.502	U	--	--	0.0662	U	--	--
Field Parameters																																					
Conductivity	uS/cm	577		0.1	0.1	2065		0.1	0.1	580		0.1	0.1	308.2		0.1	0.1	337.8		0.1	0.1	930		0.1	0.1	802		0.1	0.1	--		--	--	--		--	--
Depth to Water*	ft btoc	37.27		0.01	0.01	45.03		0.01	0.01	11.93		0.01	0.01	10.63		0.01	0.01	10.25		0.01	0.01	24.33		0.01	0.01	15.59		0.01	0.01	--		--	--	--		--	--
Dissolved Oxygen	mg/L	3.35		0.01	0.01	1.46		0.01	0.01	1.23		0.01	0.01	3.63		0.01	0.01	1.48		0.01	0.01	2.09		0.01	0.01	2.15		0.01	0.01	--		--	--	--		--	--
Groundwater Elevation*	ft msl	3250.77		0.01	0.01	3260.00		0.01	0.01	3245.48		0.01	0.01	3246.77		0.01	0.01	3246.61		0.01	0.01	3245.67		0.01	0.01	3244.88		0.01	0.01	--		--	--	--		--	--
Oxidation Reduction Potential	millivolts	12.4		0.1	0.1	-48.0		0.1	0.1	39.4		0.1	0.1	-58.0		0.1	0.1	-90.2		0.1	0.1	31.2		0.1	0.1	-79.8		0.1	0.1	--		--	--	--		--	--
Temperature	C	6.5		0.01	0.01	11.3		0.01	0.01	12.9		0.01	0.01	14.4		0.01	0.01	15.0		0.01	0.01	10.5		0.01	0.01	9.3		0.01	0.01	--		--	--	--		--	--
Turbidity	NTU	1.99		0.1	0.1	8.2		0.1	0.1	50.2		0.1	0.1	9.04		0.1	0.1	8.9		0.1	0.1	2.31		0.1	0.1	24.63		0.1	0.1	--		--	--	--		--	--

Notes:
BKGD = Background
CCR = Coal Combustion Residuals
GWPS = Groundwater Protection Standards
QL = Quantitation Limit
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
ft btoc = feet below top of casing
ft msl = feet above mean sea level
Bold font = Detected laboratory constituent
* - Groundwater Elevation data collected on November 1, 2021

Qualifiers (Qual):
J = Estimated Result
U = Radiological sample not detected above the Miniumum Detection Concentration

DRAWINGS



REFERENCE

BASE MAP CONSISTS OF USGS TOPOGRAPHIC QUADRANGLES
MOUNT STORM LAKE AND GREENLAND GAP, WEST VIRGINIA, DATED 2016.

2000 0 2000
SCALE FEET

CLIENT
DOMINION ENERGY

PROJECT
MOUNT STORM POWER STATION
LOW VOLUME WASTE SETTLING PONDS

CONSULTANT
GOLDER

YYYY-MM-DD	2018-12-28
DESIGNED	-
PREPARED	BPG
REVIEWED	MGW
APPROVED	MGW

TITLE
SITE LOCATION MAP

PROJECT NO. 20-139936
REV. 0
DRAWING 1

Path: G:\Plan Production Data Files\Drawing Data Files\17-89754 - MT STORMG - LOW VOLUME WASTE SETTLING PONDS (SA18 CCR\Active Drawings\178975\4MS_G00.dwg

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

LEGEND

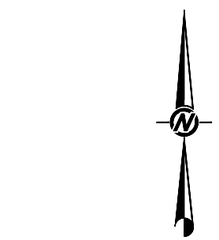
3250	POTENTIOMETRIC SURFACE CONTOUR
→	APPROXIMATE GROUNDWATER FLOW LINE
i1gw = 195'	GROUNDWATER FLOW PATH LENGTH (FEET)
OW-9A	EXISTING GROUNDWATER MONITORING WELL LOCATION AND IDENTIFICATION (SHALLOW AQUIFER)
OW-4A	EXISTING GROUNDWATER MONITORING WELL LOCATION AND IDENTIFICATION (DEEP AQUIFER)
(3244.15)	STATIC GROUNDWATER ELEVATION FOR OCTOBER 12, 2020 (FEET ABOVE MEAN SEA LEVEL)
OW-9B	EXISTING OBSERVATION WELL LOCATION AND IDENTIFICATION (DEEP AQUIFER)
OW-15	EXISTING OBSERVATION WELL LOCATION AND IDENTIFICATION (SHALLOW AQUIFER)

REFERENCE

1. AERIAL IMAGE TAKEN FROM SATELLITES.PRO ON 01/25/2022.
2. 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.
3. 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.

NOTES

1. SURFACE WATER ELEVATION = 3,244 FEET ABOVE MEAN SEA LEVEL.



150 0 150
SCALE FEET

YYYY-MM-DD 2022-01-24
DESIGNED CS
PREPARED SIB
REVIEWED MGW
APPROVED MGW

CLIENT
DOMINION ENERGY

CONSULTANT
GOLDER
MEMBER OF WSP

PROJECT
MOUNT STORM POWER STATION
LOW VOLUME WASTE SETTLING PONDS

TITLE
POTENTIOMETRIC SURFACE MAP
APRIL 28-29, 2021

PROJECT NO.
20-13993621

REV. 0
DRAWING 2

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

1 in
0

Path: G:\Plan Production Data Files\Drawing Data Files\20-13993621\E - GW-Map\Active Drawings\20139936E01.dwg

LEGEND

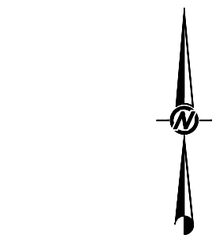
3250	POTENTIOMETRIC SURFACE CONTOUR
→	APPROXIMATE GROUNDWATER FLOW LINE
$i_4$gw = 195'	GROUNDWATER FLOW PATH LENGTH (FEET)
OW-9A	EXISTING GROUNDWATER MONITORING WELL LOCATION AND IDENTIFICATION (SHALLOW AQUIFER)
OW-4A	EXISTING GROUNDWATER MONITORING WELL LOCATION AND IDENTIFICATION (DEEP AQUIFER)
(3244.15)	STATIC GROUNDWATER ELEVATION FOR OCTOBER 12, 2020 (FEET ABOVE MEAN SEA LEVEL)
OW-9B	EXISTING OBSERVATION WELL LOCATION AND IDENTIFICATION (DEEP AQUIFER)
OW-15	EXISTING OBSERVATION WELL LOCATION AND IDENTIFICATION (SHALLOW AQUIFER)

REFERENCE

1. AERIAL IMAGE FROM SATELLITES.PRO ON 01/25/2022.
2. 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.
3. 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.

NOTES

1. SURFACE WATER ELEVATION = 3,244 FEET ABOVE MEAN SEA LEVEL.



150 0 150
SCALE FEET

YYYY-MM-DD	2022-01-24
DESIGNED	CS
PREPARED	SIB
REVIEWED	MGW
APPROVED	MGW

CLIENT
DOMINION ENERGY

CONSULTANT
GOLDER
MEMBER OF WSP

PROJECT
MOUNT STORM POWER STATION
LOW VOLUME WASTE SETTLING PONDS

TITLE
POTENTIOMETRIC SURFACE MAP
NOVEMBER 04, 2021

PROJECT NO.
20-13993621

REV.
0

DRAWING
3

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

1 in
0

Path: G:\Plan Production Data Files\Drawing Data Files\20-13993621\E - GW-Map\Active Drawings\20139936E02.dwg

APPENDIX A

FIRST SEMI-ANNUAL 2021 ASSESSMENT MONITORING PROGRAM EVENT FIELD DATA SHEETS, LABORATORY CERTIFICATES OF ANALYSIS, CHAIN-OF-CUSTODY FORMS, AND DATA VALIDATION FORMS

Date: 4/28/21
4/29/21

GOLDER

WELL GAUGING LOG

Project Name: MSPS LVWSP

Project No./Task No.: 2013993621

Sampler(s): John England, Collin Megee

Equipment: Water Level Indicator

Well ID	Personnel (initials)	Time	DTW (feet)	DTB (feet)	Well Condition Summary				
					Protective Casing	Well Casing	Label	Lock	Pad Condition
OW-7A	CM	17.21	36.57	—	OK / Damaged	OK / Damaged	OK / Inadequate	Yes / No	OK / Damaged
OW-8	CM	1726	44.44	—	OK / Damaged	OK / Damaged	OK / Inadequate	Yes / No	OK / Damaged
OW-2A	CM	1648	12.70	—	OK / Damaged	OK / Damaged	OK / Inadequate	Yes / No	OK / Damaged
OW-4A	CM	1640	11.61	—	OK / Damaged	OK / Damaged	OK / Inadequate	Yes / No	OK / Damaged
OW-10	CM	1645	11.23	—	OK / Damaged	OK / Damaged	OK / Inadequate	Yes / No	OK / Damaged
OW-12	CM	1706	25.00	—	OK / Damaged	OK / Damaged	OK / Inadequate	Yes / No	OK / Damaged
OW-13	CM	1625	16.12	—	OK / Damaged	OK / Damaged	OK / Inadequate	Yes / No	OK / Damaged
OW-2	CM	1649	10.88	—	OK / Damaged	OK / Damaged	OK / Inadequate	Yes / No	OK / Damaged
OW-4	CM	1642	12.79	—	OK / Damaged	OK / Damaged	OK / Inadequate	Yes / No	OK / Damaged
OW-6A	CM	1330	6.46	—	OK / Damaged	OK / Damaged	OK / Inadequate	Yes / No	OK / Damaged
OW-6B (D 4/29/21)	CM	1653	7.59	—	OK / Damaged	OK / Damaged	OK / Inadequate	Yes / No	OK / Damaged
OW-7B	CM	1724	35.08	—	OK / Damaged	OK / Damaged	OK / Inadequate	Yes / No	OK / Damaged
OW-8A	CM	1728	57.50	—	OK / Damaged	OK / Damaged	OK / Inadequate	Yes / No	OK / Damaged
OW-9A	CM	1617	DRY	13.23	OK / Damaged	OK / Damaged	OK / Inadequate	Yes / No	OK / Damaged
OW-9B	CM	1622	20.52	—	OK / Damaged	OK / Damaged	OK / Inadequate	Yes / No	OK / Damaged
OW-11	CM	1636	15.71	—	OK / Damaged	OK / Damaged	OK / Inadequate	Yes / No	OK / Damaged
					OK / Damaged	OK / Damaged	OK / Inadequate	Yes / No	OK / Damaged

Observations/Notes:

Signature: CM

QA/QC Signature: John England

Date: 4/29/21

Date: 5/10/21

Date: 04/28/21 04/29/21

GOLDER

WELL GAUGING LOG

Project Name: MSPS LVWSP Project No./Task No.: 2013993121

Sampler(s): John England, Collin Megee

Equipment: Water Level Indicator

Well ID	Personnel (initials)	Time	DTW (feet)	DTB (feet)	Well Condition Summary: Protective Casing	Well Casing	Label	Lock	Pad Condition
OW-14	CM	1610	17.90	—	x OK / Damaged	x OK / Damaged	x OK / Inadequate	x Yes / No	x OK / Damaged
4/29/21 OW-15	CM	1310	8.98	—	x OK / Damaged	x OK / Damaged	x OK / Inadequate	x Yes / No	x OK / Damaged
OW-16	CM	1700	21.72	—	x OK / Damaged	x OK / Damaged	x OK / Inadequate	x Yes / No	x OK / Damaged
OW-17	CM	1635	22.07	—	x OK / Damaged	x OK / Damaged	x OK / Inadequate	x Yes / No	x OK / Damaged
OW-18	CM	1657	21.73	—	x OK / Damaged	x OK / Damaged	x OK / Inadequate	x Yes / No	x OK / Damaged
OW-19	CM	1718	27.75	—	x OK / Damaged	x OK / Damaged	x OK / Inadequate	x Yes / No	x 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
					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: [signature] Date: 4/29/21

QA/QC Signature: John England Date: 4/29/21

Page 1 of 2

GOLDER

MICROPURGE SAMPLING LOG

Date: 4/29/21

Weather: Rain

Project Name: Mt. Storm

Project No./Task No.: 20139436.21

Event: ISA21 LVWSP (CCR)

Sampler(s): J. England

Well ID: OW-7A

Field Calibration Completed: 4/29/21 @ 0840

Well Diameter: 2.0 inches

Initial Depth to Water: 36.49 feet

Depth to Bottom: — feet

Water Column Thickness: — feet

Equipment Used:
- [x] WL Indicator
- [x] YSI 19E104904
- [ ] 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
0950	5.91	582	16.8	1.19	10.5	17.5	39.90	250
0955	5.95	544	12.8	1.14	10.6	19.9	40.05	250
1000	6.00	541	10.0	1.19	10.6	20.5	40.11	250
1005	6.01	538	6.0	1.17	10.6	22.7	40.15	250
1010	— SAMPLED —							
1019	6.10	501	6.6	1.80	10.5	24.1	40.20	250

Purge Cycle (End): 22/8 sec @ 25 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): ~0.5

Total Purge Volume (Gallons): ~3.0

Purge Water Management: On site containment

Purge Observations (color, odor, turbidity, sheen): purge dried 0940 / Clear grab sample

Sample Time: 1010

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

Sample Parameters/Analyte(s):
- [ ] Petro (DRO)
- [x] CCR Appendix III
- [x] CCR Appendix IV
- [ ] Closed 5-year NPDES (Diss [Ba, Bo, Fe, Mn], SO4, TDS, TSS)
- [ ] Phase A&B NPDES (Diss [Al, Sb, As, Ba, Be, Bo, Cd, Cu, Fe, Pb, Mn, Hg, Ni, Se, Tl],Cl, Cr Tot, NO2+NO3 N, SO4, NH3-N Tot, TDS, TSS)
- [ ] Variance (Diss [Be, Cd, Cr, Pb, Ni])
- [ ] LVWSP IV Detects (As, Ba, Be, Cd, Cr, Co, Pb, Mo, Tl, Rad 226-228)
- [ ] Phase A IV Detects (As, Ba, Be, Cd, Cr, Co, Pb, Li, Se, Rad 226-228)
- [ ] Phase B IV Detects (As, Ba, Be, Cd, Cr, Co, Pb, Li, Mo, Se, Tl, Rad 226-228)

Other Observations / Equipment Operation Problems:

Sampler Signature: John England Date: 4/29/21

QA/QC Signature: [signature] Date: 5/10/21

MICROPURGE SAMPLING LOG

Date: 4/29/21
Weather: Rainy, 60's

Project Name: Mt. Storm PS
Project No./Task No.: 20139936 21
Event: 1SA2021 LVSWP
Sampler(s): C. Meece
Well ID: DW-6
Field Calibration Completed: 04/29/21 @ 0840
Well Diameter: 2.0 inches
Initial Depth to Water: 49.45 feet
Depth to Bottom: — feet
Water Column Thickness: — feet

Equipment Used:
- [X] WL Indicator
- [X] YSI PROPSS 18L100401
- [ ] 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
1000	6.19	2551	53.31	2.63	11.6	136.6	44.55	~250
1005	6.21	2564	41.40	2.14	11.6	67.6	44.80	~250
1010	6.23	2465	39.57	1.76	11.6	37.0	44.96	~250
1015	6.25	2434	26.08	1.57	11.8	19.5	44.79	~250
1020	6.26	2446	20.47	1.50	11.7	9.1	44.84	~250
1025	6.27	2444	16.69	1.51	11.7	1.7	44.60	~250
1030	6.27	2435	13.43	1.38	11.6	-4.1	44.68	~250
1035	6.27	2447	11.19	1.44	11.6	-7.9	44.50	~250
1040	6.28	2446	9.73	1.36	11.6	-11.4	44.55	~250
1045				SAMPLE				
1110	6.33	2445	6.63	1.54	12.3	-25.3	44.58	~250

Purge Cycle (End): 52/8 @ 35 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): ~0.30
Total Purge Volume (Gallons): ~3.5
Purge Water Management: on site Containment O.K.S.
Purge Observations (color, odor, turbidity, sheen): Clear grab Sample
Purge time: 0950
Sample Time: 1045
Field Filtered (0.45um): [ ] Yes [X] No

Sample Parameters/Analyte(s):
- [ ] Petro (DRO)
- [X] CCR Appendix III
- [X] CCR Appendix IV
- [ ] Closed 5-year NPDES (Diss [Ba, Bo, Fe, Mn], SO4, TDS, TSS)
- [ ] Phase A&B NPDES (Diss [Al, Sb, As, Ba, Be, Bo, Cd, Cu, Fe, Pb, Mn, Hg, Ni, Se, Tl],Cl, Cr Tot, NO2+NO3 N, SO4, NH3-N Tot, TDS, TSS)
- [ ] Variance (Diss [Be, Cd, Cr, Pb, Ni])
- [X] LVWSP IV Detects (As, Ba, Be, Cd, Cr, Co, Pb, Mo, Tl, Rad 226-228)
- [ ] Phase A IV Detects (As, Ba, Be, Cd, Cr, Co, Pb, Li, Se, Rad 226-228)
- Phase B IV Detects (As, Ba, Be, Cd, Cr, Co, Pb, Li, Mo, Se, Tl, Rad 226-228)

Other Observations / Equipment Operation Problems: —

Sampler Signature: [signature] Date: 4/29/21
QA/QC Signature: John England Date: 5/10/21

GOLDER

MICROPURGE SAMPLING LOG

Date: 4/29/21

Weather: Rain 60s

Project Name: Mt. Storm

Project No./Task No.: 20135943621

Event: ISA21 LVWSP

Sampler(s): J. England

Well ID: OW-2A

Field Calibration Completed: 4/29/21 @ 0840

Well Diameter: 2.0 inches

Initial Depth to Water: 13.06 feet

Depth to Bottom: — feet

Water Column Thickness: — feet

Equipment Used: ☒ WL Indicator ☐ Turbidity Meter ☐ Air Tank ☒ Dedicated Bladder Pump

☒ YSI 19E101999 ☐ Peristaltic Pump ☐ Compressor ☐ Non-dedicated BP

☐ In-Situ — ☐ MP-10 Controller Box ☒ 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
1040	6.50	726	76.9	0.30	10.2	36.6	13.17	250
1045	6.52	727	79.9	0.23	10.2	-41.5	13.19	250
1050	6.56	727	52.6	0.21	10.2	-50.5	13.19	250
1055	6.55	724	40.1	0.18	10.2	-49.1	13.17	250
1100	6.54	722	46.8	0.13	10.3	-52.3	13.17	250
1105	6.55	723	18.4	0.14	10.2	-54.1	13.18	250
1110	6.54	721	9.9	0.16	10.2	-55.4	13.18	250
1115	—	SAMPLED	—					
1119	6.48	717	11.3	0.14	10.2	-43.5	13.19	250

Purge Cycle (End): 26/45 sec @ 25 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): ~0.75

Total Purge Volume (Gallons): ~4.0 Purge Water Management: on site Containment

Purge Observations (color, odor, turbidity, sheen): purge time: 1030 / Clear grab Sample

Sample Time: 1115 Field Filtered (0.45um): ☐ Yes ☒ No

Sample Parameters/Analyte(s): ☐ Petro (DRO) ☒ CCR Appendix III ☒ CCR Appendix IV

☐ Closed 5-year NPDES (Diss [Ba, Bo, Fe, Mn], SO4, TDS, TSS) ☐ Phase A&B NPDES (Diss [Al, Sb, As, Ba, Be, Bo, Cd, Cu, Fe, Pb, Mn, Hg, Ni, Se, Tl],Cl, Cr Tot, NO2+NO3 N, SO4, NH3-N Tot, TDS, TSS)

☐ Variance (Diss [Be, Cd, Cr, Pb, Ni]) ☐ LVWSP IV Detects (As, Ba, Be, Cd, Cr, Co, Pb, Mo, Tl, Rad 226-228) ☐ Phase A IV Detects (As, Ba, Be, Cd, Cr, Co, Pb, Li, Se, Rad 226-228) Phase B IV Detects (As, Ba, Be, Cd, Cr, Co, Pb, Li, Mo, Se, Tl, Rad 226-228)

Other Observations / Equipment Operation Problems: —

Sampler Signature: John England Date: 4/29/21

QA/QC Signature: [signature] Date: 5/10/21

MICROPURGE SAMPLING LOG

Date: 04/29/21

Weather: Overcast, windy 60's

GOLDER

Project Name: Mt. Storm PS

Project No./Task No.: 20139362 1

Event: 1SA2021 LVWSP

Sampler(s): C. Meyer

Well ID: OW-4A

Field Calibration Completed: 04/29/21 @ 0840

Well Diameter: 2.0 inches

Initial Depth to Water: 11.72 feet

Depth to Bottom: — feet

Water Column Thickness: ~ feet

Equipment Used:
- [x] WL Indicator
- [x] YSI Pro DSS 19L100401
- [ ] In-Situ —
- [ ] Turbidity Meter
- [ ] Peristaltic Pump
- [ ] MP-10 Controller Box
- [ ] Air Tank
- [ ] Compressor
- [x] MP-15 Controller Box
- [x] Dedicated Bladder Pump
- [ ] Non-dedicated BP
- [ ] ~

Time (5 minute int.)	pH (S.U.)	Sp. Cond. (uS/cm)^{oC}	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	ORP (mV)	DTW (feet)	Flow Rate (mL/min)
Stabilization	+/- 0.1	+/- 3%	if >10, +/- 10%	+/- 10%	+/- 1°C	+/- 10 mV	<0.3 feet	<500
~~1500~~ 1410	6.55	254.0	129.05	1.52	13.0	1.2	11.77	~300
1415	6.63	239.2	105.61	1.29	13.0	-14.5	11.80	~300
1420	6.67	224.0	71.44	1.25	13.1	-25.3	11.82	~300
1425	6.72	212.0	60.80	1.15	13.0	-42.9	11.80	~300
1430	6.73	208.7	57.30	1.04	12.9	-46.2	11.75	~300
1435	6.74	206.2	42.39	1.04	12.9	-48.9	11.73	~300
1440	6.73	202.9	42.81	1.04	12.9	-50.1	11.73	~300
1445	6.73	202.4	44.79	1.10	13.0	-51.2	11.75	~300
1450	6.71	202.4	30.07	1.23	13.0	-49.1	11.76	~300
1455	6.71	200.5	31.89	1.09	13.0	-50.2	11.78	~300
1500	6.71	199.8	28.52	1.28	12.9	-50.1	11.75	~300
1505	6.71	197.7	23.75	1.01	13.0	-50.3	11.75	~300
1510	6.71	197.9	23.11	1.08	12.9	-50.3	11.73	~300
1515	6.71	197.4	22.32	~~1.01~~ 1.12	13.0	-50.3	11.75	~300
1520 SAMPLE TIME	6.73	189.2	24.11	1.48	12.9	-47.6	11.80	~300

Purge Cycle (End): 26/4 @ 25 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): ~0.11

Total Purge Volume (Gallons): ~7.0

Purge Water Management: Onsite Containment O.W.S.

Purge Observations (color, odor, turbidity, sheen): Tan grab Sample

Purge time: 1405

Sample Time: 1520

Field Filtered (0.45um): [ ] Yes [ ] No

Sample Parameters/Analyte(s):
- [ ] Petro (DRO)
- [x] CCR Appendix III
- [x] CCR Appendix IV
- [ ] Closed 5-year NPDES (Diss [Ba, Bo, Fe, Mn], SO4, TDS, TSS)
- [ ] Phase A&B NPDES (Diss [Al, Sb, As, Ba, Be, Bo, Cd, Cu, Fe, Pb, Mn, Hg, Ni, Se, Tl],Cl, Cr Tot, NO2+NO3 N, SO4, NH3-N Tot, TDS, TSS)
- [ ] Variance (Diss [Be, Cd, Cr, Pb, Ni])
- [x] LVWSP IV Detects (As, Ba, Be, Cd, Cr, Co, Pb, Mo, Tl, Rad 226-228)
- [ ] Phase A IV Detects (As, Ba, [illegible] Cd, Cr, Co, Pb, Li, Se, Rad 226-228)
- Phase B IV Detects (As, Ba, Be, Cd, Cr, Co, Pb, Li, Mo, Se, Tl, Rad 226-228)

Other Observations / Equipment Operation Problems: Duplicate Sampled Here

DTP = 28.45

Sampler Signature: [signature] Date: 04/29/21

Page 1 of 1

QA/QC Signature: John England Date: 5/10/21

MICROPURGE SAMPLING LOG

GOLDER

Date: 4/30/21

Weather: Overcast, windy 50's

Project Name: Mt. Storm PS

Project No./Task No.: 20139936.01

Event: 1S21 LVWSP

Sampler(s): C. Mega

Well ID: OW-10

Field Calibration Completed: 4/30/21 @ 0805

Well Diameter: 2.0 inches

Initial Depth to Water: 11.46' feet

Depth to Bottom: — feet

Water Column Thickness: — feet

Equipment Used:
- [x] WL Indicator
- [x] YSI Pro DSS 16L100401
- [ ] 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
0835	6.66	324.2	14.87	1.23	10.1	112.0	11.48	~400
0840	6.48	323.6	12.89	1.13	10.1	77.0	11.50	~400
0843	6.39	320.6	9.05	1.09	10.0	52.0	11.60	~400
0846	6.38	321.5	7.57	0.97	10.0	35.0	11.68	~400
0849	6.36	322.0	6.45	1.00	10.0	23.3	11.52	~400
0852	6.35	321.8	6.42	0.99	10.0	13.9	11.55	~400
0855	—	—	—	— SAMPLE —	—	—	—	—
0903	6.38	321.5	5.20	0.74	10.0	-13.3	11.50	~400

If switch to 3min readings

Purge Cycle (End): 27/3 Secs @ 25 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): —

Total Purge Volume (Gallons): ~5.0

Purge Water Management: On-site Containment O.W.S.

Purge Observations (color, odor, turbidity, sheen): Clear grab Sample

Purge time: 0807

Sample Time: —

Field Filtered (0.45um): [ ] Yes [ ] No

Sample Parameters/Analyte(s):
- [ ] Petro (DRO)
- [x] CCR Appendix III
- [x] CCR Appendix IV
- [ ] Closed 5-year NPDES (Diss [Ba, Bo, Fe, Mn], SO4, TDS, TSS)
- [ ] Phase A&B NPDES (Diss [Al, Sb, As, Ba, Be, Bo, Cd, Cu, Fe, Pb, Mn, Hg, Ni, Se, Tl],Cl, Cr Tot, NO2+NO3 N, SO4, NH3-N Tot, TDS, TSS)
- [ ] Variance (Diss [Be, Cd, Cr, Pb, Ni])
- [x] LVWSP IV Detects (As, Ba, Be, Cd, Cr, Co, Pb, Mo, Tl, Rad 226-228)
- [ ] Phase A IV Detects (As, Ba, Cd, Cr, Co, Pb, Li, Se, Rad 226-228)
- [ ] Phase B IV Detects (As, Ba, Be, Cd, Cr, Co, Pb, Li, Mo, Se, Tl, Rad 226-228)

Other Observations / Equipment Operation Problems: —

Sampler Signature: [signature] Date: 4/30/21

QA/QC Signature: John England Date: 5/10/21

GOLDER

MICROPURGE SAMPLING LOG

Date: 04/29/21

Weather: Overcast, windy 60's

Project Name: Mt. Storm PS

Project No./Task No.: 2013993621

Event: 1SA2021 LVWSP

Sampler(s): C. Magee

Well ID: OW-12

Field Calibration Completed: 04/29/21 @ 0840

Well Diameter: 2.0 inches

Initial Depth to Water: 25.04 feet

Depth to Bottom: 31.02 feet

Water Column Thickness: feet

Equipment Used:
- [x] WL Indicator
- [x] YSI PODSS 19210044
- [ ] In-Situ
- [ ] Turbidity Meter
- [ ] Peristaltic Pump
- [ ] MP-10 Controller Box
- [ ] Air Tank
- [ ] Compressor
- [ ] MP-15 Controller Box
- [ ] Dedicated Bladder Pump
- [x] 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
1620	5.98	896	22.73	1.42	13.3	19.8	25.25	~400
1625	5.95	987	14.76	1.33	13.2	22.3	25.30	~400
1630	5.96	1033	11.78	1.34	13.3	23.0	25.22	~400
1635	5.96	~~1069~~ 1063	9.75	1.30	13.3	23.2	25.25	~400
1640	5.96	1076	9.25	1.27	13.3	23.4	25.20	~400
1645	5.97	1092	7.66	1.28	13.3	24.1	25.18	~400
1650			SAMPLE					
1732	6.02	1152	7.87	1.88	14.7	24.6	25.25	~400

Purge Cycle (End): 11/4 seconds @ 25 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): —

Total Purge Volume (Gallons): ~3.5 Purge Water Management: DNS Containment O.W.S

Purge Observations (color, odor, turbidity, sheen): Clear grab sample / small amount of black floating solids

Purge time: 1613

Sample Time: 1650

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

Sample Parameters/Analyte(s):
- [ ] Petro (DRO)
- [x] CCR Appendix III
- [x] CCR Appendix IV
- [ ] Closed 5-year NPDES (Diss [Ba, Bo, Fe, Mn], SO4, TDS, TSS)
- [ ] Phase A&B NPDES (Diss [Al, Sb, As, Ba, Be, Bo, Cd, Cu, Fe, Pb, Mn, Hg, Ni, Se, Tl],Cl, Cr Tot, NO2+NO3 N, SO4, NH3-N Tot, TDS, TSS)
- [ ] Variance (Diss [Be, Cd, Cr, Pb, Ni])
- [x] LVWSP IV Detects (As, Ba, Be, Cd, Cr, Co, Pb, Mo, Tl, Rad 226-228)
- [ ] Phase A IV Detects (As, Ba, Cd, Cr, Co, Pb, Li, Se, Rad 226-228)
- [ ] Phase B IV Detects (As, Ba, Be, Cd, Cr, Co, Pb, Li, Mo, Se, Tl, Rad 226-228)

Other Observations / Equipment Operation Problems: MS/MSD Sampled @ OW-12

Sampler Signature: Date: 4/29/21

QA/QC Signature: John Englert Date: 5/10/21

MICROPURGE SAMPLING LOG

Date: 4/29/21
Weather: Overcast, 60's

GOLDER

Project Name: Mt. Storm PS
Project No./Task No.: 20139362.1
Event: ISA2021 LVWSP
Sampler(s): C. Negee
Well ID: OW-13
Field Calibration Completed: 04/29/21 0814
Well Diameter: 2.0 inches
Initial Depth to Water: 16.20 feet
Depth to Bottom: ~27.34 feet
Water Column Thickness: ~ feet

Equipment Used:
- ☐ WL Indicator
- ☒ YSI PRODSS 16L100401
- ☐ In-Situ ~
- ☐ Turbidity Meter
- ☐ Peristaltic Pump
- ☐ MP-10 Controller Box
- ☐ Air Tank
- ☐ Compressor
- ☒ MP-15 Controller Box
- ☐ 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
1139	6.22	1073	233.95	2.47	12.7	-35.6	16.83	~200
1144	6.14	1064	180.44	2.12	12.6	-33.8	16.80	~200
1149	6.13	1058	186.82	2.04	12.6	-34.7	16.85	~200
1154	6.11	1042	122.02	2.16	12.6	-33.7	16.88	~200
1159	6.10	1020	115.34	2.39	12.5	-32.0	16.94	~200
1204	6.12	991	120.47	2.47	12.5	-31.8	16.90	~200
1209	6.04	965	98.94	2.50	12.8	-26.7	16.95	~200
1214	6.03	939	103.80	2.44	13.1	-22.1	16.85	~200
1219	6.03	891	90.76	2.42	13.2	-20.4	16.83	~200
1224	6.02	874	84.20	2.42	13.2	-20.2	16.80	~200
1229	6.02	869	85.12	2.57	13.1	-17.6	16.90	~200
1235			SAMPLE					
1307	6.00	867	75.26	2.03	14.8	-13.3	16.90	~200

Purge Cycle (End): 24/6 @ 20 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): ~0.15
Total Purge Volume (Gallons): ~2.5
Purge Water Management: On Site Containment 0.45
Purge Observations (color, odor, turbidity, sheen): lt brown grab sample / small amount of foam in purge water
Purge time: 1134
Sample Time: 1235
Field Filtered (0.45um): ☐ Yes ☒ No

Sample Parameters/Analyte(s):
- ☐ Petro (DRO)
- ☒ CCR Appendix III
- ☒ CCR Appendix IV
- ☐ Closed 5-year NPDES (Diss [Ba, Bo, Fe, Mn], SO4, TDS, TSS)
- ☐ Phase A&B NPDES (Diss [Al, Sb, As, Ba, Be, Bo, Cd, Cu, Fe, Pb, Mn, Hg, Ni, Se, Tl],Cl, Cr Tot, NO2+NO3 N, SO4, NH3-N Tot, TDS, TSS)
- ☐ Variance (Diss [Be, Cd, Cr, Pb, Ni])
- ☒ LVWSP IV Detects (As, Ba, Be, Cd, Cr, Co, Pb, Mo, Tl, Rad 226-228)
- ☐ Phase A IV Detects (As, Ba, Be, Cd, Cr, Co, Pb, Li, Se, Rad 226-228)
- Phase B IV Detects (As, Ba, Be, Cd, Cr, Co, Pb, Li, Mo, Se, Tl, Rad 226-228)

Other Observations / Equipment Operation Problems:

Sampler Signature: [signature] Date: 4/29/21
QA/QC Signature: John England Date: 5/10/21

GOLDER

MICROPURGE SAMPLING LOG

Date: 4/29/21

Weather: Overcast, Windy 60s

Project Name: Mt. Storm P.S. | Project No./Task No.: 20139936 21

Event: ISA2021 LVWSP | Sampler(s): C. Megee

Well ID: Duplicate | Field Calibration Completed: 04/29/21 @ 0840

Well Diameter: — inches | Initial Depth to Water: — feet

Depth to Bottom: — feet | Water Column Thickness: — feet

Equipment Used:
- [x] WL Indicator
- [ ] YSI —
- [ ] In-Situ —
- [ ] Turbidity Meter
- [ ] Peristaltic Pump
- [ ] MP-10 Controller Box
- [ ] Air Tank
- [ ] Compressor
- [ ] MP-15 Controller Box
- [ ] 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
1530	—	—	—	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: Onsite O.W.S

Purge Observations (color, odor, turbidity, sheen): Ten grab Sample

Sample Time: 1530 | Field Filtered (0.45um): [ ] Yes [x] No

Sample Parameters/Analyte(s):
- [ ] Petro (DRO)
- [x] CCR Appendix III
- [x] CCR Appendix IV
- [ ] Closed 5-year NPDES (Diss [Ba, Bo, Fe, Mn], SO4, TDS, TSS)
- [ ] Phase A&B NPDES (Diss [Al, Sb, As, Ba, Be, Bo, Cd, Cu, Fe, Pb, Mn, Hg, Ni, Se, Tl],Cl, Cr Tot, NO2+NO3 N, SO4, NH3-N Tot, TDS, TSS)
- [ ] Variance (Diss [Be, Cd, Cr, Pb, Ni])
- [x] LVWSP IV Detects (As, Ba, Be, Cd, Cr, Co, Pb, Mo, Tl, Rad 226-228)
- [ ] Phase A IV Detects (As, Ba, Be, Cd, Cr, Co, Pb, Li, Se, Rad 226-228)
- [ ] Phase B IV Detects (As, Ba, Be, Cd, Cr, Co, Pb, Li, Mo, Se, Tl, Rad 226-228)

Other Observations / Equipment Operation Problems:

Sampler Signature: [signature] Date: 4/29/21

QA/QC Signature: John England Date: 5/10/21

GOLDER

MICROPURGE SAMPLING LOG

Date: 4/29/21

Weather: Rain 60s

Project Name: Mt. Storm

Project No./Task No.: 20139936.21

Event: ISAZI LVWSP

Sampler(s): J. England

Well ID: Field Blank

Field Calibration Completed: 04/29/21 @

Well Diameter: — inches

Initial Depth to Water: — feet

Depth to Bottom: — feet

Water Column Thickness: — feet

Equipment Used:
- ☐ WL Indicator
- ☐ YSI —
- ☐ In-Situ —
- ☐ Turbidity Meter
- ☐ Peristaltic Pump
- ☐ MP-10 Controller Box
- ☐ Air Tank
- ☐ Compressor
- ☐ MP-15 Controller Box
- ☐ 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
0910	—	—	— 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 with lab DI H_2O

Sample Time: 0910 Field Filtered (0.45um): ☐ Yes ☒ No

Sample Parameters/Analyte(s):
- ☐ Petro (DRO)
- ☒ CCR Appendix III
- ☒ CCR Appendix IV
- ☐ Closed 5-year NPDES (Diss [Ba, Bo, Fe, Mn], SO4, TDS, TSS)
- ☐ Phase A&B NPDES (Diss [Al, Sb, As, Ba, Be, Bo, Cd, Cu, Fe, Pb, Mn, Hg, Ni, Se, Tl],Cl, Cr Tot, NO2+NO3 N, SO4, NH3-N Tot, TDS, TSS)
- ☐ Variance (Diss [Be, Cd, Cr, Pb, Ni])
- ☐ LVWSP IV Detects (As, Ba, Be, Cd, Cr, Co, Pb, Mo, Tl, Rad 226-228)
- ☐ Phase A IV Detects (As, Ba, Be, Cd, Cr, Co, Pb, Li, Se, Rad 226-228)
- Phase B IV Detects (As, Ba, Be, Cd, Cr, Co, Pb, Li, Mo, Se, Tl, Rad 226-228)

Other Observations / Equipment Operation Problems:

Sampler Signature: John England Date: 4/29/21

QA/QC Signature: Date: 5/10/21

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

Laboratory Job ID: 240-148543-1
Client Project/Site: Mount Storm LVWSP
Revision: 2

For:
Dominion Energy Services, Inc.
5000 Dominion Blvd
Glen Allen, Virginia 23060

Attn: Kelly Hicks

Roxanne Cisneros

Authorized for release by:
6/18/2021 2:37:30 PM

Roxanne Cisneros, Senior Project Manager
(615)301-5761
roxanne.cisneros@Eurofinset.com

Table of Contents

Definitions/Glossary

Client: Dominion Energy Services, Inc.
Project/Site: Mount Storm LVWSP

Job ID: 240-148543-1

Qualifiers

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.
X	Carrier is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 240-148543-1

Laboratory: Eurofins TestAmerica, Canton

Narrative

Job Narrative
240-148543-1

Comments
Revised report 6/18/2021 to correct method 9056 MS/MSD calculated recoveries.

Revised Report 6/17/2021 to report Fluoride, Chloride, and Sulfate in mg/L per client request.

Receipt
The samples were received on 5/1/2021 10:20 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 5 coolers at receipt time were 0.5º C, 0.6º C, 0.7º C, 1.8º C and 3.3º C.

RAD
Method PrecSep-21: Ra-226 Prep Batch 160-509471: Insufficient sample volume was available to perform a sample duplicate (DUP) for the following samples: 042921NOW-7A (240-148543-1), 042921NOW-8 (240-148543-2), 042921NOW-4A (240-148543-4) and 043021NOW-10 (240-148543-5). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method PrecSep-21: Ra-226 Prep Batch 160-509471: The following samples were prepared at a reduced aliquot due to Matrix: 042921NOW-2A (240-148543-3). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead of a sample duplicate (DUP) to demonstrate batch precision.

Method PrecSep_0: Ra-228 Prep Batch 160-509474: Insufficient sample volume was available to perform a sample duplicate (DUP) for the following samples: 042921NOW-7A (240-148543-1), 042921NOW-8 (240-148543-2), 042921NOW-4A (240-148543-4) and 043021NOW-10 (240-148543-5). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method PrecSep_0: Ra-228 Prep Batch 160-509474: The following samples were prepared at a reduced aliquot due to Matrix: 042921NOW-2A (240-148543-3). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead of a sample duplicate (DUP) to demonstrate batch precision.

Method PrecSep-21: Ra-226 Prep Batch 160-509510: The following sample had a barium pellet that was smaller than the QC. 042921NOW-13 (240-148543-7).

Methods 9320: Radium-228 Batch 509474: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. 042921NOW-7A (240-148543-1), 042921NOW-8 (240-148543-2), 042921NOW-2A (240-148543-3), 042921NOW-4A (240-148543-4), 043021NOW-10 (240-148543-5), (LCS 160-509474/1-A), (LCSD 160-509474/2-A) and (MB 160-509474/23-A)

Method PrecSep_0: Ra-228 Batch 160-512616: During the in-growth process, the following samples needed to be filtered due to sediment present in the sample: 042921NOW-12 (240-148543-6[MS]), 042921NOW-13 (240-148543-7) and 042921FD (240-148543-9). This is an indicator of matrix interference.

Methods 9315: Radium-226 prep batch 160-509471: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. 042921NOW-7A (240-148543-1), 042921NOW-8 (240-148543-2), 042921NOW-2A (240-148543-3), 042921NOW-4A (240-148543-4), 043021NOW-10 (240-148543-5), (LCS 160-509471/1-A), (LCSD 160-509471/2-A) and (MB 160-509471/23-A)

Method 9315: Radium-226 prep batch 160-509510: The following sample had a Barium recovery below the 40% QC limit: 042921NOW-13 (240-148543-7). The detection limit was achieved, so the laboratory does not believe this excursion adversely affects the data. Therefore, the data have been reported with this narrative.

Methods 9315: Radium-226 Batch 509510: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act

Job ID: 240-148543-1 (Continued)

Laboratory: Eurofins TestAmerica, Canton (Continued)

detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. 042921NOW-12 (240-148543-6), 042921NOW-12 (240-148543-6[MS]), 042921NOW-12 (240-148543-6[MSD]), 042921NOW-13 (240-148543-7), 042921FB (240-148543-8), 042921FD (240-148543-9), (LCS 160-509510/1-A), (MB 160-509510/23-A)

Methods 9320: Radium-228 Batch 512616: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. 042921NOW-12 (240-148543-6), 042921NOW-12 (240-148543-6[MS]), 042921NOW-12 (240-148543-6[MSD]), 042921NOW-13 (240-148543-7), 042921FB (240-148543-8), 042921FD (240-148543-9), (LCS 160-512616/1-A), (MB 160-512616/23-A)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Method Summary

Client: Dominion Energy Services, Inc.
Project/Site: Mount Storm LVWSP

Job ID: 240-148543-1

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	TAL CAN
6020B	Metals (ICP/MS)	SW846	TAL CAN
7470A	Mercury (CVAA)	SW846	TAL CAN
9056A	Anions, Ion Chromatography	SW846	TAL CAN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PIT
9315	Radium-226 (GFPC)	SW846	TAL SL
9320	Radium-228 (GFPC)	SW846	TAL SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	TAL SL
Pos			
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL CAN
7470A	Preparation, Mercury	SW846	TAL CAN
PrecSep_0	Preparation, Precipitate Separation	None	TAL SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	TAL SL

Protocol References:

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Dominion Energy Services, Inc.
Project/Site: Mount Storm LVWSP

Job ID: 240-148543-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
240-148543-1	042921NOW-7A	Water	04/29/21 10:10	05/01/21 10:20	
240-148543-2	042921NOW-8	Water	04/29/21 10:45	05/01/21 10:20	
240-148543-3	042921NOW-2A	Water	04/29/21 11:15	05/01/21 10:20	
240-148543-4	042921NOW-4A	Water	04/29/21 15:20	05/01/21 10:20	
240-148543-5	043021NOW-10	Water	04/30/21 08:55	05/01/21 10:20	
240-148543-6	042921NOW-12	Water	04/29/21 16:50	05/01/21 10:20	
240-148543-7	042921NOW-13	Water	04/29/21 12:35	05/01/21 10:20	
240-148543-8	042921FB	Water	04/29/21 09:10	05/01/21 10:20	
240-148543-9	042921FD	Water	04/29/21 15:30	05/01/21 10:20	

Detection Summary

Client: Dominion Energy Services, Inc.
Project/Site: Mount Storm LVWSP

Job ID: 240-148543-1

Client Sample ID: 042921NOW-7A — Lab Sample ID: 240-148543-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	290		5.0	2.2	ug/L	1		6020B	Total Recoverable
Calcium	42000		1000	580	ug/L	1		6020B	Total Recoverable
Cobalt	3.1		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	16		8.0	1.7	ug/L	1		6020B	Total Recoverable
Chloride	93		1.0	0.28	mg/L	1		9056A	Total/NA
Fluoride	0.17		0.050	0.024	mg/L	1		9056A	Total/NA
Sulfate	9.9		1.0	0.35	mg/L	1		9056A	Total/NA
Total Dissolved Solids	230		10	10	mg/L	1		SM 2540C	Total/NA

Client Sample ID: 042921NOW-8 — Lab Sample ID: 240-148543-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	100		100	23	ug/L	1		6010D	Total Recoverable
Barium	8.7		5.0	2.2	ug/L	1		6020B	Total Recoverable
Calcium	390000		1000	580	ug/L	1		6020B	Total Recoverable
Cobalt	32		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	12		8.0	1.7	ug/L	1		6020B	Total Recoverable
Chloride	260		10	2.8	mg/L	10		9056A	Total/NA
Fluoride	0.12		0.050	0.024	mg/L	1		9056A	Total/NA
Sulfate	930		10	3.5	mg/L	10		9056A	Total/NA
Total Dissolved Solids	1800		10	10	mg/L	1		SM 2540C	Total/NA

Client Sample ID: 042921NOW-2A — Lab Sample ID: 240-148543-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	81	J	100	23	ug/L	1		6010D	Total Recoverable
Arsenic	0.84	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	250		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cadmium	1.1		1.0	0.20	ug/L	1		6020B	Total Recoverable
Calcium	110000		1000	580	ug/L	1		6020B	Total Recoverable
Cobalt	25		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	0.47	J	1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	8.8		8.0	1.7	ug/L	1		6020B	Total Recoverable
Molybdenum	3.5	J	10	1.1	ug/L	1		6020B	Total Recoverable
Chloride	26		1.0	0.28	mg/L	1		9056A	Total/NA
Fluoride	0.24		0.050	0.024	mg/L	1		9056A	Total/NA
Sulfate	160		1.0	0.35	mg/L	1		9056A	Total/NA
Total Dissolved Solids	480		10	10	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Dominion Energy Services, Inc.
Project/Site: Mount Storm LVWSP

Job ID: 240-148543-1

Client Sample ID: 042921NOW-4A — Lab Sample ID: 240-148543-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	42	J	100	23	ug/L	1		6010D	Total Recoverable
Arsenic	1.7	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	78		5.0	2.2	ug/L	1		6020B	Total Recoverable
Calcium	22000		1000	580	ug/L	1		6020B	Total Recoverable
Cobalt	0.73	J	1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	2.8	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Chloride	5.2		1.0	0.28	mg/L	1		9056A	Total/NA
Fluoride	0.088		0.050	0.024	mg/L	1		9056A	Total/NA
Sulfate	46		1.0	0.35	mg/L	1		9056A	Total/NA
Total Dissolved Solids	100		10	10	mg/L	1		SM 2540C	Total/NA

Client Sample ID: 043021NOW-10 — Lab Sample ID: 240-148543-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	49	J	100	23	ug/L	1		6010D	Total Recoverable
Barium	270		5.0	2.2	ug/L	1		6020B	Total Recoverable
Calcium	43000		1000	580	ug/L	1		6020B	Total Recoverable
Lithium	7.9	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Chloride	7.7		1.0	0.28	mg/L	1		9056A	Total/NA
Fluoride	0.26		0.050	0.024	mg/L	1		9056A	Total/NA
Sulfate	9.1		1.0	0.35	mg/L	1		9056A	Total/NA
Total Dissolved Solids	170		10	10	mg/L	1		SM 2540C	Total/NA

Client Sample ID: 042921NOW-12 — Lab Sample ID: 240-148543-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	280		100	23	ug/L	1		6010D	Total Recoverable
Arsenic	3.1	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	59		5.0	2.2	ug/L	1		6020B	Total Recoverable
Beryllium	0.46	J	1.0	0.31	ug/L	1		6020B	Total Recoverable
Cadmium	0.20	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Calcium	110000		1000	580	ug/L	1		6020B	Total Recoverable
Cobalt	30		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	6.1	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Molybdenum	8.5	J	10	1.1	ug/L	1		6020B	Total Recoverable
Thallium	0.35	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Chloride	170		1.0	0.28	mg/L	1		9056A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 042921NOW-12 (Continued) — Lab Sample ID: 240-148543-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.13		0.050	0.024	mg/L	1		9056A	Total/NA
Sulfate	280		5.0	1.7	mg/L	5		9056A	Total/NA
Total Dissolved Solids	720		10	10	mg/L	1		SM 2540C	Total/NA

Client Sample ID: 042921NOW-13 — Lab Sample ID: 240-148543-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	6.2		5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	170		5.0	2.2	ug/L	1		6020B	Total Recoverable
Calcium	17000		1000	580	ug/L	1		6020B	Total Recoverable
Chromium	6.7		2.0	0.98	ug/L	1		6020B	Total Recoverable
Cobalt	7.8		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	1.1		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	3.9	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Selenium	1.3	J	5.0	0.89	ug/L	1		6020B	Total Recoverable
Chloride	24		1.0	0.28	mg/L	1		9056A	Total/NA
Fluoride	0.059		0.050	0.024	mg/L	1		9056A	Total/NA
Sulfate	19		1.0	0.35	mg/L	1		9056A	Total/NA
Total Dissolved Solids	650		10	10	mg/L	1		SM 2540C	Total/NA

Client Sample ID: 042921FB — Lab Sample ID: 240-148543-8

No Detections.

Client Sample ID: 042921FD — Lab Sample ID: 240-148543-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	40	J	100	23	ug/L	1		6010D	Total Recoverable
Arsenic	0.82	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	70		5.0	2.2	ug/L	1		6020B	Total Recoverable
Calcium	22000		1000	580	ug/L	1		6020B	Total Recoverable
Cobalt	0.62	J	1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	2.6	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Chloride	5.0		1.0	0.28	mg/L	1		9056A	Total/NA
Fluoride	0.082		0.050	0.024	mg/L	1		9056A	Total/NA
Sulfate	46		1.0	0.35	mg/L	1		9056A	Total/NA
Total Dissolved Solids	100		10	10	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Dominion Energy Services, Inc.
Project/Site: Mount Storm LVWSP

Job ID: 240-148543-1

Client Sample ID: 042921NOW-7A

Date Collected: 04/29/21 10:10
Date Received: 05/01/21 10:20

Lab Sample ID: 240-148543-1

Matrix: Water

Method: 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<23		100	23	ug/L		05/03/21 14:00	05/04/21 21:00	1

Method: 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.57		2.0	0.57	ug/L		05/03/21 14:00	05/06/21 14:06	1
Arsenic	<0.75		5.0	0.75	ug/L		05/03/21 14:00	05/06/21 14:06	1
Barium	**290**		5.0	2.2	ug/L		05/03/21 14:00	05/06/21 14:06	1
Beryllium	<0.31		1.0	0.31	ug/L		05/03/21 14:00	05/06/21 14:06	1
Cadmium	<0.20		1.0	0.20	ug/L		05/03/21 14:00	05/06/21 14:06	1
Calcium	**42000**		1000	580	ug/L		05/03/21 14:00	05/06/21 14:06	1
Chromium	<0.98		2.0	0.98	ug/L		05/03/21 14:00	05/06/21 14:06	1
Cobalt	**3.1**		1.0	0.19	ug/L		05/03/21 14:00	05/06/21 14:06	1
Lead	<0.45		1.0	0.45	ug/L		05/03/21 14:00	05/06/21 14:06	1
Lithium	**16**		8.0	1.7	ug/L		05/03/21 14:00	05/06/21 14:06	1
Molybdenum	<1.1		10	1.1	ug/L		05/03/21 14:00	05/06/21 14:06	1
Selenium	<0.89		5.0	0.89	ug/L		05/03/21 14:00	05/06/21 14:06	1
Thallium	<0.20		1.0	0.20	ug/L		05/03/21 14:00	05/06/21 14:06	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.13		0.20	0.13	ug/L		05/03/21 14:00	05/05/21 14:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**93**		1.0	0.28	mg/L			05/13/21 18:36	1
Fluoride	**0.17**		0.050	0.024	mg/L			05/13/21 18:36	1
Sulfate	**9.9**		1.0	0.35	mg/L			05/13/21 18:36	1
Total Dissolved Solids	**230**		10	10	mg/L			05/06/21 21:20	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.368**		0.142	0.146	1.00	0.138	pCi/L	05/13/21 10:31	06/07/21 12:02	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.6*		*40 - 110*	*05/13/21 10:31*	*06/07/21 12:02*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.228	U	0.290	0.290	1.00	0.481	pCi/L	05/13/21 11:23	06/03/21 13:12	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.6*		*40 - 110*	*05/13/21 11:23*	*06/03/21 13:12*	*1*
Y Carrier	*83.0*		*40 - 110*	*05/13/21 11:23*	*06/03/21 13:12*	*1*

Client Sample Results

Client: Dominion Energy Services, Inc.
Project/Site: Mount Storm LVWSP

Job ID: 240-148543-1

Client Sample ID: 042921NOW-7A
Date Collected: 04/29/21 10:10
Date Received: 05/01/21 10:20

Lab Sample ID: 240-148543-1
Matrix: Water

Method: Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.595		0.323	0.325	5.00	0.481	pCi/L		06/09/21 22:00	1

Client: Dominion Energy Services, Inc.
Project/Site: Mount Storm LVWSP

Job ID: 240-148543-1

Client Sample ID: 042921NOW-8

Date Collected: 04/29/21 10:45
Date Received: 05/01/21 10:20

Lab Sample ID: 240-148543-2

Matrix: Water

Method: 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**100**		100	23	ug/L		05/03/21 14:00	05/04/21 21:05	1

Method: 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.57		2.0	0.57	ug/L		05/03/21 14:00	05/06/21 14:09	1
Arsenic	<0.75		5.0	0.75	ug/L		05/03/21 14:00	05/06/21 14:09	1
Barium	**8.7**		5.0	2.2	ug/L		05/03/21 14:00	05/06/21 14:09	1
Beryllium	<0.31		1.0	0.31	ug/L		05/03/21 14:00	05/06/21 14:09	1
Cadmium	<0.20		1.0	0.20	ug/L		05/03/21 14:00	05/06/21 14:09	1
Calcium	**390000**		1000	580	ug/L		05/03/21 14:00	05/06/21 14:09	1
Chromium	<0.98		2.0	0.98	ug/L		05/03/21 14:00	05/06/21 14:09	1
Cobalt	**32**		1.0	0.19	ug/L		05/03/21 14:00	05/06/21 14:09	1
Lead	<0.45		1.0	0.45	ug/L		05/03/21 14:00	05/06/21 14:09	1
Lithium	**12**		8.0	1.7	ug/L		05/03/21 14:00	05/06/21 14:09	1
Molybdenum	<1.1		10	1.1	ug/L		05/03/21 14:00	05/06/21 14:09	1
Selenium	<0.89		5.0	0.89	ug/L		05/03/21 14:00	05/06/21 14:09	1
Thallium	<0.20		1.0	0.20	ug/L		05/03/21 14:00	05/06/21 14:09	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.13		0.20	0.13	ug/L		05/03/21 14:00	05/05/21 14:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**260**		10	2.8	mg/L			05/13/21 19:16	10
Fluoride	**0.12**		0.050	0.024	mg/L			05/13/21 18:56	1
Sulfate	**930**		10	3.5	mg/L			05/13/21 19:16	10
Total Dissolved Solids	**1800**		10	10	mg/L			05/06/21 21:20	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.186**		0.135	0.136	1.00	0.183	pCi/L	05/13/21 10:31	06/07/21 12:02	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*57.4*		*40 - 110*	*05/13/21 10:31*	*06/07/21 12:02*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.389	U	0.402	0.403	1.00	0.654	pCi/L	05/13/21 11:23	06/03/21 13:12	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*57.4*		*40 - 110*	*05/13/21 11:23*	*06/03/21 13:12*	*1*
Y Carrier	*77.4*		*40 - 110*	*05/13/21 11:23*	*06/03/21 13:12*	*1*

Client Sample Results

Client: Dominion Energy Services, Inc.
Project/Site: Mount Storm LVWSP

Job ID: 240-148543-1

Client Sample ID: 042921NOW-8
Date Collected: 04/29/21 10:45
Date Received: 05/01/21 10:20

Lab Sample ID: 240-148543-2
Matrix: Water

Method: Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.575	U	0.424	0.425	5.00	0.654	pCi/L		06/09/21 22:00	1

Client: Dominion Energy Services, Inc.
Project/Site: Mount Storm LVWSP

Job ID: 240-148543-1

Client Sample ID: 042921NOW-2A

Date Collected: 04/29/21 11:15
Date Received: 05/01/21 10:20

Lab Sample ID: 240-148543-3

Matrix: Water

Method: 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**81**	**J**	100	23	ug/L		05/03/21 14:00	05/04/21 21:09	1

Method: 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.57		2.0	0.57	ug/L		05/03/21 14:00	05/06/21 14:11	1
Arsenic	**0.84**	**J**	5.0	0.75	ug/L		05/03/21 14:00	05/06/21 14:11	1
Barium	**250**		5.0	2.2	ug/L		05/03/21 14:00	05/06/21 14:11	1
Beryllium	<0.31		1.0	0.31	ug/L		05/03/21 14:00	05/06/21 14:11	1
Cadmium	**1.1**		1.0	0.20	ug/L		05/03/21 14:00	05/06/21 14:11	1
Calcium	**110000**		1000	580	ug/L		05/03/21 14:00	05/06/21 14:11	1
Chromium	<0.98		2.0	0.98	ug/L		05/03/21 14:00	05/06/21 14:11	1
Cobalt	**25**		1.0	0.19	ug/L		05/03/21 14:00	05/06/21 14:11	1
Lead	**0.47**	**J**	1.0	0.45	ug/L		05/03/21 14:00	05/06/21 14:11	1
Lithium	**8.8**		8.0	1.7	ug/L		05/03/21 14:00	05/06/21 14:11	1
Molybdenum	**3.5**	**J**	10	1.1	ug/L		05/03/21 14:00	05/06/21 14:11	1
Selenium	<0.89		5.0	0.89	ug/L		05/03/21 14:00	05/06/21 14:11	1
Thallium	<0.20		1.0	0.20	ug/L		05/03/21 14:00	05/06/21 14:11	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.13		0.20	0.13	ug/L		05/03/21 14:00	05/05/21 14:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**26**		1.0	0.28	mg/L			05/13/21 19:37	1
Fluoride	**0.24**		0.050	0.024	mg/L			05/13/21 19:37	1
Sulfate	**160**		1.0	0.35	mg/L			05/13/21 19:37	1
Total Dissolved Solids	**480**		10	10	mg/L			05/06/21 21:20	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.492**		0.222	0.227	1.00	0.245	pCi/L	05/13/21 10:31	06/07/21 12:03	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*59.2*		*40 - 110*	*05/13/21 10:31*	*06/07/21 12:03*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.559	U	0.503	0.505	1.00	0.806	pCi/L	05/13/21 11:23	06/03/21 13:12	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*59.2*		*40 - 110*	*05/13/21 11:23*	*06/03/21 13:12*	*1*
Y Carrier	*83.0*		*40 - 110*	*05/13/21 11:23*	*06/03/21 13:12*	*1*

Client Sample Results

Client: Dominion Energy Services, Inc.
Project/Site: Mount Storm LVWSP

Job ID: 240-148543-1

Client Sample ID: 042921NOW-2A
Date Collected: 04/29/21 11:15
Date Received: 05/01/21 10:20

Lab Sample ID: 240-148543-3
Matrix: Water

Method: Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.05		0.550	0.554	5.00	0.806	pCi/L		06/09/21 22:00	1

Client: Dominion Energy Services, Inc.
Project/Site: Mount Storm LVWSP

Job ID: 240-148543-1

Client Sample ID: 042921NOW-4A

Date Collected: 04/29/21 15:20
Date Received: 05/01/21 10:20

Lab Sample ID: 240-148543-4

Matrix: Water

Method: 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**42**	**J**	100	23	ug/L		05/03/21 14:00	05/04/21 21:22	1

Method: 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.57		2.0	0.57	ug/L		05/03/21 14:00	05/06/21 14:14	1
Arsenic	**1.7**	**J**	5.0	0.75	ug/L		05/03/21 14:00	05/06/21 14:14	1
Barium	**78**		5.0	2.2	ug/L		05/03/21 14:00	05/06/21 14:14	1
Beryllium	<0.31		1.0	0.31	ug/L		05/03/21 14:00	05/06/21 14:14	1
Cadmium	<0.20		1.0	0.20	ug/L		05/03/21 14:00	05/06/21 14:14	1
Calcium	**22000**		1000	580	ug/L		05/03/21 14:00	05/06/21 14:14	1
Chromium	<0.98		2.0	0.98	ug/L		05/03/21 14:00	05/06/21 14:14	1
Cobalt	**0.73**	**J**	1.0	0.19	ug/L		05/03/21 14:00	05/06/21 14:14	1
Lead	<0.45		1.0	0.45	ug/L		05/03/21 14:00	05/06/21 14:14	1
Lithium	**2.8**	**J**	8.0	1.7	ug/L		05/03/21 14:00	05/06/21 14:14	1
Molybdenum	<1.1		10	1.1	ug/L		05/03/21 14:00	05/06/21 14:14	1
Selenium	<0.89		5.0	0.89	ug/L		05/03/21 14:00	05/06/21 14:14	1
Thallium	<0.20		1.0	0.20	ug/L		05/03/21 14:00	05/06/21 14:14	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.13		0.20	0.13	ug/L		05/03/21 14:00	05/05/21 14:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.2**		1.0	0.28	mg/L			05/13/21 20:17	1
Fluoride	**0.088**		0.050	0.024	mg/L			05/13/21 20:17	1
Sulfate	**46**		1.0	0.35	mg/L			05/13/21 20:17	1
Total Dissolved Solids	**100**		10	10	mg/L			05/06/21 21:20	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.212**		0.130	0.132	1.00	0.175	pCi/L	05/13/21 10:31	06/07/21 12:02	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*75.7*		*40 - 110*	*05/13/21 10:31*	*06/07/21 12:02*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.181	U	0.285	0.286	1.00	0.481	pCi/L	05/13/21 11:23	06/03/21 13:12	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*75.7*		*40 - 110*	*05/13/21 11:23*	*06/03/21 13:12*	*1*
Y Carrier	*85.6*		*40 - 110*	*05/13/21 11:23*	*06/03/21 13:12*	*1*

Client Sample Results

Client: Dominion Energy Services, Inc.
Project/Site: Mount Storm LVWSP

Job ID: 240-148543-1

Client Sample ID: 042921NOW-4A
Date Collected: 04/29/21 15:20
Date Received: 05/01/21 10:20

Lab Sample ID: 240-148543-4
Matrix: Water

Method: Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.393	U	0.313	0.315	5.00	0.481	pCi/L		06/09/21 22:00	1

Client: Dominion Energy Services, Inc.
Project/Site: Mount Storm LVWSP

Job ID: 240-148543-1

Client Sample ID: 043021NOW-10

Date Collected: 04/30/21 08:55
Date Received: 05/01/21 10:20

Lab Sample ID: 240-148543-5

Matrix: Water

Method: 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**49**	**J**	100	23	ug/L		05/03/21 14:00	05/04/21 21:26	1

Method: 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.57		2.0	0.57	ug/L		05/03/21 14:00	05/06/21 14:16	1
Arsenic	<0.75		5.0	0.75	ug/L		05/03/21 14:00	05/06/21 14:16	1
Barium	**270**		5.0	2.2	ug/L		05/03/21 14:00	05/06/21 14:16	1
Beryllium	<0.31		1.0	0.31	ug/L		05/03/21 14:00	05/06/21 14:16	1
Cadmium	<0.20		1.0	0.20	ug/L		05/03/21 14:00	05/06/21 14:16	1
Calcium	**43000**		1000	580	ug/L		05/03/21 14:00	05/06/21 14:16	1
Chromium	<0.98		2.0	0.98	ug/L		05/03/21 14:00	05/06/21 14:16	1
Cobalt	<0.19		1.0	0.19	ug/L		05/03/21 14:00	05/06/21 14:16	1
Lead	<0.45		1.0	0.45	ug/L		05/03/21 14:00	05/06/21 14:16	1
Lithium	**7.9**	**J**	8.0	1.7	ug/L		05/03/21 14:00	05/06/21 14:16	1
Molybdenum	<1.1		10	1.1	ug/L		05/03/21 14:00	05/06/21 14:16	1
Selenium	<0.89		5.0	0.89	ug/L		05/03/21 14:00	05/06/21 14:16	1
Thallium	<0.20		1.0	0.20	ug/L		05/03/21 14:00	05/06/21 14:16	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.13		0.20	0.13	ug/L		05/03/21 14:00	05/05/21 14:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**7.7**		1.0	0.28	mg/L			05/13/21 20:37	1
Fluoride	**0.26**		0.050	0.024	mg/L			05/13/21 20:37	1
Sulfate	**9.1**		1.0	0.35	mg/L			05/13/21 20:37	1
Total Dissolved Solids	**170**		10	10	mg/L			05/06/21 21:20	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.128	U	0.112	0.112	1.00	0.168	pCi/L	05/13/21 10:31	06/07/21 12:03	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*73.9*		*40 - 110*	*05/13/21 10:31*	*06/07/21 12:03*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.252	U	0.287	0.288	1.00	0.472	pCi/L	05/13/21 11:23	06/03/21 13:15	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*73.9*		*40 - 110*	*05/13/21 11:23*	*06/03/21 13:15*	*1*
Y Carrier	*85.2*		*40 - 110*	*05/13/21 11:23*	*06/03/21 13:15*	*1*

Client: Dominion Energy Services, Inc.
Project/Site: Mount Storm LVWSP

Job ID: 240-148543-1

Client Sample ID: 043021NOW-10
Date Collected: 04/30/21 08:55
Date Received: 05/01/21 10:20

Lab Sample ID: 240-148543-5
Matrix: Water

Method: Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.379	U	0.308	0.309	5.00	0.472	pCi/L		06/09/21 22:00	1

Client: Dominion Energy Services, Inc.
Project/Site: Mount Storm LVWSP

Job ID: 240-148543-1

Client Sample ID: 042921NOW-12

Date Collected: 04/29/21 16:50
Date Received: 05/01/21 10:20

Lab Sample ID: 240-148543-6

Matrix: Water

Method: 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**280**		100	23	ug/L		05/03/21 14:00	05/04/21 19:43	1

Method: 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.57		2.0	0.57	ug/L		05/03/21 14:00	05/06/21 13:13	1
Arsenic	**3.1**	**J**	5.0	0.75	ug/L		05/03/21 14:00	05/06/21 13:13	1
Barium	**59**		5.0	2.2	ug/L		05/03/21 14:00	05/06/21 13:13	1
Beryllium	**0.46**	**J**	1.0	0.31	ug/L		05/03/21 14:00	05/06/21 13:13	1
Cadmium	**0.20**	**J**	1.0	0.20	ug/L		05/03/21 14:00	05/06/21 13:13	1
Calcium	**110000**		1000	580	ug/L		05/03/21 14:00	05/06/21 13:13	1
Chromium	<0.98		2.0	0.98	ug/L		05/03/21 14:00	05/06/21 13:13	1
Cobalt	**30**		1.0	0.19	ug/L		05/03/21 14:00	05/06/21 13:13	1
Lead	<0.45		1.0	0.45	ug/L		05/03/21 14:00	05/06/21 13:13	1
Lithium	**6.1**	**J**	8.0	1.7	ug/L		05/03/21 14:00	05/06/21 13:13	1
Molybdenum	**8.5**	**J**	10	1.1	ug/L		05/03/21 14:00	05/06/21 13:13	1
Selenium	<0.89		5.0	0.89	ug/L		05/03/21 14:00	05/06/21 13:13	1
Thallium	**0.35**	**J**	1.0	0.20	ug/L		05/03/21 14:00	05/06/21 13:13	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.13	F1	0.20	0.13	ug/L		05/03/21 14:00	05/05/21 13:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**170**		1.0	0.28	mg/L			05/13/21 20:57	1
Fluoride	**0.13**		0.050	0.024	mg/L			05/13/21 20:57	1
Sulfate	**280**		5.0	1.7	mg/L			05/13/21 22:38	5
Total Dissolved Solids	**720**		10	10	mg/L			05/06/21 21:20	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.198**		0.0995	0.101	1.00	0.118	pCi/L	05/13/21 15:59	06/07/21 12:06	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*70.9*		*40 - 110*	*05/13/21 15:59*	*06/07/21 12:06*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.265	U	0.289	0.290	1.00	0.474	pCi/L	06/03/21 11:26	06/10/21 09:25	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.4*		*40 - 110*	*06/03/21 11:26*	*06/10/21 09:25*	*1*
Y Carrier	*87.9*		*40 - 110*	*06/03/21 11:26*	*06/10/21 09:25*	*1*

Client: Dominion Energy Services, Inc.
Project/Site: Mount Storm LVWSP

Job ID: 240-148543-1

Client Sample ID: 042921NOW-12
Date Collected: 04/29/21 16:50
Date Received: 05/01/21 10:20

Lab Sample ID: 240-148543-6
Matrix: Water

Method: Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.463	U	0.306	0.307	5.00	0.474	pCi/L		06/11/21 12:04	1

Client: Dominion Energy Services, Inc.
Project/Site: Mount Storm LVWSP

Job ID: 240-148543-1

Client Sample ID: 042921NOW-13

Date Collected: 04/29/21 12:35
Date Received: 05/01/21 10:20

Lab Sample ID: 240-148543-7

Matrix: Water

Method: 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<23		100	23	ug/L		05/03/21 14:00	05/04/21 21:31	1

Method: 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.57		2.0	0.57	ug/L		05/03/21 14:00	05/06/21 14:19	1
Arsenic	**6.2**		5.0	0.75	ug/L		05/03/21 14:00	05/06/21 14:19	1
Barium	**170**		5.0	2.2	ug/L		05/03/21 14:00	05/06/21 14:19	1
Beryllium	<0.31		1.0	0.31	ug/L		05/03/21 14:00	05/06/21 14:19	1
Cadmium	<0.20		1.0	0.20	ug/L		05/03/21 14:00	05/06/21 14:19	1
Calcium	**17000**		1000	580	ug/L		05/03/21 14:00	05/06/21 14:19	1
Chromium	**6.7**		2.0	0.98	ug/L		05/03/21 14:00	05/06/21 14:19	1
Cobalt	**7.8**		1.0	0.19	ug/L		05/03/21 14:00	05/06/21 14:19	1
Lead	**1.1**		1.0	0.45	ug/L		05/03/21 14:00	05/06/21 14:19	1
Lithium	**3.9**	**J**	8.0	1.7	ug/L		05/03/21 14:00	05/06/21 14:19	1
Molybdenum	<1.1		10	1.1	ug/L		05/03/21 14:00	05/06/21 14:19	1
Selenium	**1.3**	**J**	5.0	0.89	ug/L		05/03/21 14:00	05/06/21 14:19	1
Thallium	<0.20		1.0	0.20	ug/L		05/03/21 14:00	05/06/21 14:19	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.13		0.20	0.13	ug/L		05/03/21 14:00	05/05/21 14:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**24**		1.0	0.28	mg/L			05/13/21 23:38	1
Fluoride	**0.059**		0.050	0.024	mg/L			05/13/21 23:38	1
Sulfate	**19**		1.0	0.35	mg/L			05/13/21 23:38	1
Total Dissolved Solids	**650**		10	10	mg/L			05/06/21 21:20	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.365	U	0.258	0.260	1.00	0.366	pCi/L	05/13/21 15:59	06/07/21 12:06	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*30.6*	*X*	*40 - 110*	*05/13/21 15:59*	*06/07/21 12:06*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**1.11**		0.614	0.622	1.00	0.922	pCi/L	06/03/21 11:26	06/10/21 09:25	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.4*		*40 - 110*	*06/03/21 11:26*	*06/10/21 09:25*	*1*
Y Carrier	*86.7*		*40 - 110*	*06/03/21 11:26*	*06/10/21 09:25*	*1*

Client: Dominion Energy Services, Inc.
Project/Site: Mount Storm LVWSP

Job ID: 240-148543-1

Client Sample ID: 042921NOW-13
Date Collected: 04/29/21 12:35
Date Received: 05/01/21 10:20

Lab Sample ID: 240-148543-7
Matrix: Water

Method: Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	1.48		0.666	0.674	5.00	0.922	pCi/L		06/11/21 12:04	1

Client: Dominion Energy Services, Inc.
Project/Site: Mount Storm LVWSP

Job ID: 240-148543-1

Client Sample ID: 042921FB

Date Collected: 04/29/21 09:10
Date Received: 05/01/21 10:20

Lab Sample ID: 240-148543-8

Matrix: Water

Method: 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<23		100	23	ug/L		05/03/21 14:00	05/04/21 21:35	1

Method: 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.57		2.0	0.57	ug/L		05/03/21 14:00	05/06/21 14:21	1
Arsenic	<0.75		5.0	0.75	ug/L		05/03/21 14:00	05/06/21 14:21	1
Barium	<2.2		5.0	2.2	ug/L		05/03/21 14:00	05/06/21 14:21	1
Beryllium	<0.31		1.0	0.31	ug/L		05/03/21 14:00	05/06/21 14:21	1
Cadmium	<0.20		1.0	0.20	ug/L		05/03/21 14:00	05/06/21 14:21	1
Calcium	<580		1000	580	ug/L		05/03/21 14:00	05/06/21 14:21	1
Chromium	<0.98		2.0	0.98	ug/L		05/03/21 14:00	05/06/21 14:21	1
Cobalt	<0.19		1.0	0.19	ug/L		05/03/21 14:00	05/06/21 14:21	1
Lead	<0.45		1.0	0.45	ug/L		05/03/21 14:00	05/06/21 14:21	1
Lithium	<1.7		8.0	1.7	ug/L		05/03/21 14:00	05/06/21 14:21	1
Molybdenum	<1.1		10	1.1	ug/L		05/03/21 14:00	05/06/21 14:21	1
Selenium	<0.89		5.0	0.89	ug/L		05/03/21 14:00	05/06/21 14:21	1
Thallium	<0.20		1.0	0.20	ug/L		05/03/21 14:00	05/06/21 14:21	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.13		0.20	0.13	ug/L		05/03/21 14:00	05/05/21 14:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.28		1.0	0.28	mg/L			05/13/21 23:58	1
Fluoride	<0.024		0.050	0.024	mg/L			05/13/21 23:58	1
Sulfate	<0.35		1.0	0.35	mg/L			05/13/21 23:58	1
Total Dissolved Solids	<10		10	10	mg/L			05/06/21 21:20	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.156**		0.0964	0.0974	1.00	0.132	pCi/L	05/13/21 15:59	06/07/21 13:52	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*74.2*		*40 - 110*	*05/13/21 15:59*	*06/07/21 13:52*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.141	U	0.219	0.219	1.00	0.368	pCi/L	06/03/21 11:26	06/10/21 09:25	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.9*		*40 - 110*	*06/03/21 11:26*	*06/10/21 09:25*	*1*
Y Carrier	*89.0*		*40 - 110*	*06/03/21 11:26*	*06/10/21 09:25*	*1*

Client: Dominion Energy Services, Inc.
Project/Site: Mount Storm LVWSP

Job ID: 240-148543-1

Client Sample ID: 042921FB
Date Collected: 04/29/21 09:10
Date Received: 05/01/21 10:20

Lab Sample ID: 240-148543-8
Matrix: Water

Method: Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.297	U	0.239	0.240	5.00	0.368	pCi/L		06/11/21 12:04	1

Client: Dominion Energy Services, Inc.
Project/Site: Mount Storm LVWSP

Job ID: 240-148543-1

Client Sample ID: 042921FD

Date Collected: 04/29/21 15:30
Date Received: 05/01/21 10:20

Lab Sample ID: 240-148543-9

Matrix: Water

Method: 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**40**	**J**	100	23	ug/L		05/03/21 14:00	05/04/21 21:39	1

Method: 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.57		2.0	0.57	ug/L		05/03/21 14:00	05/06/21 14:24	1
Arsenic	**0.82**	**J**	5.0	0.75	ug/L		05/03/21 14:00	05/06/21 14:24	1
Barium	**70**		5.0	2.2	ug/L		05/03/21 14:00	05/06/21 14:24	1
Beryllium	<0.31		1.0	0.31	ug/L		05/03/21 14:00	05/06/21 14:24	1
Cadmium	<0.20		1.0	0.20	ug/L		05/03/21 14:00	05/06/21 14:24	1
Calcium	**22000**		1000	580	ug/L		05/03/21 14:00	05/06/21 14:24	1
Chromium	<0.98		2.0	0.98	ug/L		05/03/21 14:00	05/06/21 14:24	1
Cobalt	**0.62**	**J**	1.0	0.19	ug/L		05/03/21 14:00	05/06/21 14:24	1
Lead	<0.45		1.0	0.45	ug/L		05/03/21 14:00	05/06/21 14:24	1
Lithium	**2.6**	**J**	8.0	1.7	ug/L		05/03/21 14:00	05/06/21 14:24	1
Molybdenum	<1.1		10	1.1	ug/L		05/03/21 14:00	05/06/21 14:24	1
Selenium	<0.89		5.0	0.89	ug/L		05/03/21 14:00	05/06/21 14:24	1
Thallium	<0.20		1.0	0.20	ug/L		05/03/21 14:00	05/06/21 14:24	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.13		0.20	0.13	ug/L		05/03/21 14:00	05/05/21 14:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.0**		1.0	0.28	mg/L			05/14/21 00:18	1
Fluoride	**0.082**		0.050	0.024	mg/L			05/14/21 00:18	1
Sulfate	**46**		1.0	0.35	mg/L			05/14/21 00:18	1
Total Dissolved Solids	**100**		10	10	mg/L			05/06/21 21:20	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.260**		0.118	0.120	1.00	0.132	pCi/L	05/13/21 15:59	06/07/21 13:51	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*61.9*		*40 - 110*	*05/13/21 15:59*	*06/07/21 13:51*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.497**		0.265	0.269	1.00	0.394	pCi/L	06/03/21 11:26	06/10/21 09:25	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.7*		*40 - 110*	*06/03/21 11:26*	*06/10/21 09:25*	*1*
Y Carrier	*86.4*		*40 - 110*	*06/03/21 11:26*	*06/10/21 09:25*	*1*

Client Sample Results

Client: Dominion Energy Services, Inc.
Project/Site: Mount Storm LVWSP

Job ID: 240-148543-1

Client Sample ID: 042921FD
Date Collected: 04/29/21 15:30
Date Received: 05/01/21 10:20

Lab Sample ID: 240-148543-9
Matrix: Water

Method: Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.757		0.290	0.295	5.00	0.394	pCi/L		06/11/21 12:04	1

Tracer/Carrier Summary

Client: Dominion Energy Services, Inc.
Project/Site: Mount Storm LVWSP

Job ID: 240-148543-1

Method: 9315 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)
		Ba
Lab Sample ID	Client Sample ID	(40-110)
240-148543-1	042921NOW-7A	79.6
240-148543-2	042921NOW-8	57.4
240-148543-3	042921NOW-2A	59.2
240-148543-4	042921NOW-4A	75.7
240-148543-5	043021NOW-10	73.9
240-148543-6	042921NOW-12	70.9
240-148543-6 MS	042921NOW-12	72.1
240-148543-6 MSD	042921NOW-12	76.9
240-148543-7	042921NOW-13	30.6 X
240-148543-8	042921FB	74.2
240-148543-9	042921FD	61.9
500-198714-G-2-B DU	Duplicate	53.5
LCS 160-509471/1-A	Lab Control Sample	61.0
LCS 160-509510/1-A	Lab Control Sample	70.0
LCSD 160-509471/2-A	Lab Control Sample Dup	70.6
MB 160-509471/23-A	Method Blank	81.4
MB 160-509510/23-A	Method Blank	72.4

Tracer/Carrier Legend

Ba = Ba Carrier

Method: 9320 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
		Ba	Y
Lab Sample ID	Client Sample ID	(40-110)	(40-110)
240-148543-1	042921NOW-7A	79.6	83.0
240-148543-2	042921NOW-8	57.4	77.4
240-148543-3	042921NOW-2A	59.2	83.0
240-148543-4	042921NOW-4A	75.7	85.6
240-148543-5	043021NOW-10	73.9	85.2
240-148543-6	042921NOW-12	89.4	87.9
240-148543-6 MS	042921NOW-12	91.6	88.2
240-148543-6 MSD	042921NOW-12	86.6	89.7
240-148543-7	042921NOW-13	79.4	86.7
240-148543-8	042921FB	91.9	89.0
240-148543-9	042921FD	89.7	86.4
500-198714-G-1-B DU	Duplicate	86.0	84.5
LCS 160-509474/1-A	Lab Control Sample	61.0	81.5
LCS 160-512616/1-A	Lab Control Sample	90.3	89.3
LCSD 160-509474/2-A	Lab Control Sample Dup	70.6	79.3
MB 160-509474/23-A	Method Blank	81.4	86.0
MB 160-512616/23-A	Method Blank	79.4	86.7

Tracer/Carrier Legend

Ba = Ba Carrier
Y = Y Carrier

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-483760/1-A
Matrix: Water
Analysis Batch: 484159

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 483760

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<23		100	23	ug/L		05/03/21 14:00	05/04/21 19:22	1

Lab Sample ID: LCS 240-483760/2-A
Matrix: Water
Analysis Batch: 484159

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 483760

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	1000	1000		ug/L		100	80 - 120

Lab Sample ID: 240-148543-6 MS
Matrix: Water
Analysis Batch: 484159

Client Sample ID: 042921NOW-12
Prep Type: Total Recoverable
Prep Batch: 483760

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	280		1000	1300		ug/L		102	75 - 125

Lab Sample ID: 240-148543-6 MSD
Matrix: Water
Analysis Batch: 484159

Client Sample ID: 042921NOW-12
Prep Type: Total Recoverable
Prep Batch: 483760

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Boron	280		1000	1340		ug/L		106	75 - 125	3	20

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-483760/1-A
Matrix: Water
Analysis Batch: 484576

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 483760

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.57		2.0	0.57	ug/L		05/03/21 14:00	05/06/21 13:03	1
Arsenic	<0.75		5.0	0.75	ug/L		05/03/21 14:00	05/06/21 13:03	1
Barium	<2.2		5.0	2.2	ug/L		05/03/21 14:00	05/06/21 13:03	1
Beryllium	<0.31		1.0	0.31	ug/L		05/03/21 14:00	05/06/21 13:03	1
Cadmium	<0.20		1.0	0.20	ug/L		05/03/21 14:00	05/06/21 13:03	1
Calcium	<580		1000	580	ug/L		05/03/21 14:00	05/06/21 13:03	1
Chromium	<0.98		2.0	0.98	ug/L		05/03/21 14:00	05/06/21 13:03	1
Cobalt	<0.19		1.0	0.19	ug/L		05/03/21 14:00	05/06/21 13:03	1
Lead	<0.45		1.0	0.45	ug/L		05/03/21 14:00	05/06/21 13:03	1
Lithium	<1.7		8.0	1.7	ug/L		05/03/21 14:00	05/06/21 13:03	1
Molybdenum	<1.1		10	1.1	ug/L		05/03/21 14:00	05/06/21 13:03	1
Selenium	<0.89		5.0	0.89	ug/L		05/03/21 14:00	05/06/21 13:03	1
Thallium	<0.20		1.0	0.20	ug/L		05/03/21 14:00	05/06/21 13:03	1

Lab Sample ID: LCS 240-483760/3-A
Matrix: Water
Analysis Batch: 484576

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 483760

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1000	965		ug/L		96	80 - 120

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 240-483760/3-A
Matrix: Water
Analysis Batch: 484576

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 483760

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	1000	976		ug/L		98	80 - 120
Beryllium	500	494		ug/L		99	80 - 120
Cadmium	500	511		ug/L		102	80 - 120
Calcium	25000	24300		ug/L		97	80 - 120
Chromium	500	516		ug/L		103	80 - 120
Cobalt	500	506		ug/L		101	80 - 120
Lead	500	522		ug/L		104	80 - 120
Molybdenum	500	495		ug/L		99	80 - 120
Selenium	1000	969		ug/L		97	80 - 120
Thallium	1000	1040		ug/L		104	80 - 120

Lab Sample ID: 240-148543-6 MS
Matrix: Water
Analysis Batch: 484576

Client Sample ID: 042921NOW-12
Prep Type: Total Recoverable
Prep Batch: 483760

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	3.1	J	1000	945		ug/L		94	80 - 120
Barium	59		1000	1080		ug/L		102	80 - 120
Beryllium	0.46	J	500	466		ug/L		93	80 - 120
Cadmium	0.20	J	500	496		ug/L		99	80 - 120
Calcium	110000		25000	132000	4	ug/L		97	80 - 120
Chromium	<0.98		500	504		ug/L		101	80 - 120
Cobalt	30		500	524		ug/L		99	80 - 120
Lead	<0.45		500	509		ug/L		102	80 - 120
Molybdenum	8.5	J	500	505		ug/L		99	80 - 120
Selenium	<0.89		1000	939		ug/L		94	80 - 120
Thallium	0.35	J	1000	1010		ug/L		101	80 - 120

Lab Sample ID: 240-148543-6 MSD
Matrix: Water
Analysis Batch: 484576

Client Sample ID: 042921NOW-12
Prep Type: Total Recoverable
Prep Batch: 483760

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	3.1	J	1000	934		ug/L		93	80 - 120	1	20
Barium	59		1000	984		ug/L		92	80 - 120	10	20
Beryllium	0.46	J	500	456		ug/L		91	80 - 120	2	20
Cadmium	0.20	J	500	481		ug/L		96	80 - 120	3	20
Calcium	110000		25000	130000	4	ug/L		89	80 - 120	2	20
Chromium	<0.98		500	488		ug/L		98	80 - 120	3	20
Cobalt	30		500	512		ug/L		96	80 - 120	2	20
Lead	<0.45		500	497		ug/L		99	80 - 120	2	20
Molybdenum	8.5	J	500	488		ug/L		96	80 - 120	3	20
Selenium	<0.89		1000	915		ug/L		92	80 - 120	3	20
Thallium	0.35	J	1000	988		ug/L		99	80 - 120	2	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-483762/1-A
Matrix: Water
Analysis Batch: 484229

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 483762

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.13		0.20	0.13	ug/L		05/03/21 14:00	05/05/21 13:05	1

Lab Sample ID: LCS 240-483762/2-A
Matrix: Water
Analysis Batch: 484229

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 483762

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.00	5.63		ug/L		113	80 - 120

Lab Sample ID: 240-148543-6 MS
Matrix: Water
Analysis Batch: 484229

Client Sample ID: 042921NOW-12
Prep Type: Total/NA
Prep Batch: 483762

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	<0.13	F1	1.00	1.24	F1	ug/L		124	80 - 120

Lab Sample ID: 240-148543-6 MSD
Matrix: Water
Analysis Batch: 484229

Client Sample ID: 042921NOW-12
Prep Type: Total/NA
Prep Batch: 483762

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	<0.13	F1	1.00	1.15		ug/L		115	80 - 120	7	20

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 240-485669/3
Matrix: Water
Analysis Batch: 485669

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.28		1.0	0.28	mg/L			05/13/21 17:56	1
Fluoride	<0.024		0.050	0.024	mg/L			05/13/21 17:56	1
Sulfate	<0.35		1.0	0.35	mg/L			05/13/21 17:56	1

Lab Sample ID: LCS 240-485669/4
Matrix: Water
Analysis Batch: 485669

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	51.1		mg/L		102	90 - 110
Fluoride	2.50	2.67		mg/L		107	90 - 110
Sulfate	50.0	51.4		mg/L		103	90 - 110

Lab Sample ID: 240-148543-6 MS
Matrix: Water
Analysis Batch: 485669

Client Sample ID: 042921NOW-12
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.13		2.50	2.86		mg/L		109	80 - 120

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: 240-148543-6 MS
Matrix: Water
Analysis Batch: 485669

Client Sample ID: 042921NOW-12
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	180		250	420		mg/L		98	80 - 120
Sulfate	280		250	518		mg/L		96	80 - 120

Lab Sample ID: 240-148543-6 MSD
Matrix: Water
Analysis Batch: 485669

Client Sample ID: 042921NOW-12
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	0.13		2.50	2.92		mg/L		112	80 - 120	2	15

Lab Sample ID: 240-148543-6 MSD
Matrix: Water
Analysis Batch: 485669

Client Sample ID: 042921NOW-12
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	180		250	421		mg/L		98	80 - 120	0	15
Sulfate	280		250	519		mg/L		96	80 - 120	0	15

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 180-356000/2
Matrix: Water
Analysis Batch: 356000

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			05/06/21 21:20	1

Lab Sample ID: LCS 180-356000/1
Matrix: Water
Analysis Batch: 356000

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	486	498		mg/L		102	80 - 120

Lab Sample ID: 240-148543-1 DU
Matrix: Water
Analysis Batch: 356000

Client Sample ID: 042921NOW-7A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	230		243		mg/L		5	10

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-509471/23-A
Matrix: Water
Analysis Batch: 513127

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 509471

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.06893	U	0.101	0.102	1.00	0.173	pCi/L	05/13/21 10:31	06/07/21 12:03	1

Method: 9315 - Radium-226 (GFPC) (Continued)

Lab Sample ID: MB 160-509471/23-A
Matrix: Water
Analysis Batch: 513127

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 509471

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	81.4		40 - 110	05/13/21 10:31	06/07/21 12:03	1

Lab Sample ID: LCS 160-509471/1-A
Matrix: Water
Analysis Batch: 513131

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 509471

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.3	11.77		1.34	1.00	0.202	pCi/L	104	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	61.0		40 - 110

Lab Sample ID: LCSD 160-509471/2-A
Matrix: Water
Analysis Batch: 513131

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 509471

Analyte			Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-226			11.3	11.37		1.28	1.00	0.207	pCi/L	100	75 - 125	0.15	1

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	70.6		40 - 110

Lab Sample ID: MB 160-509510/23-A
Matrix: Water
Analysis Batch: 220906

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 509510

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.006933	U	0.0562	0.0562	1.00	0.119	pCi/L	05/13/21 15:59	06/08/21 19:35	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	72.4		40 - 110	05/13/21 15:59	06/08/21 19:35	1

Lab Sample ID: LCS 160-509510/1-A
Matrix: Water
Analysis Batch: 513127

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 509510

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.3	11.03		1.17	1.00	0.142	pCi/L	97	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	70.0		40 - 110

Method: 9315 - Radium-226 (GFPC) (Continued)

Lab Sample ID: 240-148543-6 MS
Matrix: Water
Analysis Batch: 513127

Client Sample ID: 042921NOW-12
Prep Type: Total/NA
Prep Batch: 509510

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-226	0.198		11.4	10.77		1.14	1.00	0.128	pCi/L	93	75 - 138

Carrier	*MS %Yield*	*MS Qualifier*	*Limits*
Ba Carrier	*72.1*		*40 - 110*

Lab Sample ID: 240-148543-6 MSD
Matrix: Water
Analysis Batch: 513127

Client Sample ID: 042921NOW-12
Prep Type: Total/NA
Prep Batch: 509510

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-226	0.198		11.3	11.18		1.16	1.00	0.107	pCi/L	97	75 - 138	0.18	1

Carrier	*MSD %Yield*	*MSD Qualifier*	*Limits*
Ba Carrier	*76.9*		*40 - 110*

Lab Sample ID: 500-198714-G-2-B DU
Matrix: Water
Analysis Batch: 513127

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 509510

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-226	0.114	U	0.1076	U	0.112	1.00	0.179	pCi/L	0.03	1

Carrier	*DU %Yield*	*DU Qualifier*	*Limits*
Ba Carrier	*53.5*		*40 - 110*

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-509474/23-A
Matrix: Water
Analysis Batch: 512659

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 509474

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.1212	U	0.223	0.224	1.00	0.429	pCi/L	05/13/21 11:23	06/03/21 13:12	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.4*		*40 - 110*	*05/13/21 11:23*	*06/03/21 13:12*	*1*
Y Carrier	*86.0*		*40 - 110*	*05/13/21 11:23*	*06/03/21 13:12*	*1*

Method: 9320 - Radium-228 (GFPC) (Continued)

Lab Sample ID: LCS 160-509474/1-A
Matrix: Water
Analysis Batch: 512659

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 509474

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			9.66	9.801		1.28	1.00	0.610	pCi/L	101	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*61.0*		*40 - 110*
Y Carrier	*81.5*		*40 - 110*

Lab Sample ID: LCSD 160-509474/2-A
Matrix: Water
Analysis Batch: 512659

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 509474

Analyte			Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228			9.66	9.975		1.25	1.00	0.510	pCi/L	103	75 - 125	0.07	1

Carrier	*LCSD %Yield*	*LCSD Qualifier*	*Limits*
Ba Carrier	*70.6*		*40 - 110*
Y Carrier	*79.3*		*40 - 110*

Lab Sample ID: MB 160-512616/23-A
Matrix: Water
Analysis Batch: 513624

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 512616

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.06610	U	0.246	0.246	1.00	0.432	pCi/L	06/03/21 11:26	06/10/21 09:32	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.4*		*40 - 110*	*06/03/21 11:26*	*06/10/21 09:32*	*1*
Y Carrier	*86.7*		*40 - 110*	*06/03/21 11:26*	*06/10/21 09:32*	*1*

Lab Sample ID: LCS 160-512616/1-A
Matrix: Water
Analysis Batch: 513626

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 512616

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			9.64	8.458		1.00	1.00	0.326	pCi/L	88	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*90.3*		*40 - 110*
Y Carrier	*89.3*		*40 - 110*

Method: 9320 - Radium-228 (GFPC) (Continued)

Lab Sample ID: 240-148543-6 MS
Matrix: Water
Analysis Batch: 513626

Client Sample ID: 042921NOW-12
Prep Type: Total/NA
Prep Batch: 512616

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228	0.265	U	9.64	9.228		1.08	1.00	0.394	pCi/L	93	45 - 150		

Carrier	*MS %Yield*	*MS Qualifier*	*Limits*
Ba Carrier	*91.6*		*40 - 110*
Y Carrier	*88.2*		*40 - 110*

Lab Sample ID: 240-148543-6 MSD
Matrix: Water
Analysis Batch: 513626

Client Sample ID: 042921NOW-12
Prep Type: Total/NA
Prep Batch: 512616

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228	0.265	U	9.63	9.251		1.09	1.00	0.390	pCi/L	93	45 - 150	0.01	1

Carrier	*MSD %Yield*	*MSD Qualifier*	*Limits*
Ba Carrier	*86.6*		*40 - 110*
Y Carrier	*89.7*		*40 - 110*

Lab Sample ID: 500-198714-G-1-B DU
Matrix: Water
Analysis Batch: 513626

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 512616

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-228	0.407			0.2057	U	0.240	1.00	0.393	pCi/L			0.42	1

Carrier	*DU %Yield*	*DU Qualifier*	*Limits*
Ba Carrier	*86.0*		*40 - 110*
Y Carrier	*84.5*		*40 - 110*

Metals

Prep Batch: 483760

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-148543-1	042921NOW-7A	Total Recoverable	Water	3005A	
240-148543-2	042921NOW-8	Total Recoverable	Water	3005A	
240-148543-3	042921NOW-2A	Total Recoverable	Water	3005A	
240-148543-4	042921NOW-4A	Total Recoverable	Water	3005A	
240-148543-5	043021NOW-10	Total Recoverable	Water	3005A	
240-148543-6	042921NOW-12	Total Recoverable	Water	3005A	
240-148543-7	042921NOW-13	Total Recoverable	Water	3005A	
240-148543-8	042921FB	Total Recoverable	Water	3005A	
240-148543-9	042921FD	Total Recoverable	Water	3005A	
MB 240-483760/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-483760/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-483760/3-A	Lab Control Sample	Total Recoverable	Water	3005A	
240-148543-6 MS	042921NOW-12	Total Recoverable	Water	3005A	
240-148543-6 MS	042921NOW-12	Total Recoverable	Water	3005A	
240-148543-6 MSD	042921NOW-12	Total Recoverable	Water	3005A	
240-148543-6 MSD	042921NOW-12	Total Recoverable	Water	3005A	

Prep Batch: 483762

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-148543-1	042921NOW-7A	Total/NA	Water	7470A	
240-148543-2	042921NOW-8	Total/NA	Water	7470A	
240-148543-3	042921NOW-2A	Total/NA	Water	7470A	
240-148543-4	042921NOW-4A	Total/NA	Water	7470A	
240-148543-5	043021NOW-10	Total/NA	Water	7470A	
240-148543-6	042921NOW-12	Total/NA	Water	7470A	
240-148543-7	042921NOW-13	Total/NA	Water	7470A	
240-148543-8	042921FB	Total/NA	Water	7470A	
240-148543-9	042921FD	Total/NA	Water	7470A	
MB 240-483762/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-483762/2-A	Lab Control Sample	Total/NA	Water	7470A	
240-148543-6 MS	042921NOW-12	Total/NA	Water	7470A	
240-148543-6 MSD	042921NOW-12	Total/NA	Water	7470A	

Analysis Batch: 484159

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-148543-1	042921NOW-7A	Total Recoverable	Water	6010D	483760
240-148543-2	042921NOW-8	Total Recoverable	Water	6010D	483760
240-148543-3	042921NOW-2A	Total Recoverable	Water	6010D	483760
240-148543-4	042921NOW-4A	Total Recoverable	Water	6010D	483760
240-148543-5	043021NOW-10	Total Recoverable	Water	6010D	483760
240-148543-6	042921NOW-12	Total Recoverable	Water	6010D	483760
240-148543-7	042921NOW-13	Total Recoverable	Water	6010D	483760
240-148543-8	042921FB	Total Recoverable	Water	6010D	483760
240-148543-9	042921FD	Total Recoverable	Water	6010D	483760
MB 240-483760/1-A	Method Blank	Total Recoverable	Water	6010D	483760
LCS 240-483760/2-A	Lab Control Sample	Total Recoverable	Water	6010D	483760
240-148543-6 MS	042921NOW-12	Total Recoverable	Water	6010D	483760
240-148543-6 MSD	042921NOW-12	Total Recoverable	Water	6010D	483760

Metals

Analysis Batch: 484229

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-148543-1	042921NOW-7A	Total/NA	Water	7470A	483762
240-148543-2	042921NOW-8	Total/NA	Water	7470A	483762
240-148543-3	042921NOW-2A	Total/NA	Water	7470A	483762
240-148543-4	042921NOW-4A	Total/NA	Water	7470A	483762
240-148543-5	043021NOW-10	Total/NA	Water	7470A	483762
240-148543-6	042921NOW-12	Total/NA	Water	7470A	483762
240-148543-7	042921NOW-13	Total/NA	Water	7470A	483762
240-148543-8	042921FB	Total/NA	Water	7470A	483762
240-148543-9	042921FD	Total/NA	Water	7470A	483762
MB 240-483762/1-A	Method Blank	Total/NA	Water	7470A	483762
LCS 240-483762/2-A	Lab Control Sample	Total/NA	Water	7470A	483762
240-148543-6 MS	042921NOW-12	Total/NA	Water	7470A	483762
240-148543-6 MSD	042921NOW-12	Total/NA	Water	7470A	483762

Analysis Batch: 484576

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-148543-1	042921NOW-7A	Total Recoverable	Water	6020B	483760
240-148543-2	042921NOW-8	Total Recoverable	Water	6020B	483760
240-148543-3	042921NOW-2A	Total Recoverable	Water	6020B	483760
240-148543-4	042921NOW-4A	Total Recoverable	Water	6020B	483760
240-148543-5	043021NOW-10	Total Recoverable	Water	6020B	483760
240-148543-6	042921NOW-12	Total Recoverable	Water	6020B	483760
240-148543-7	042921NOW-13	Total Recoverable	Water	6020B	483760
240-148543-8	042921FB	Total Recoverable	Water	6020B	483760
240-148543-9	042921FD	Total Recoverable	Water	6020B	483760
MB 240-483760/1-A	Method Blank	Total Recoverable	Water	6020B	483760
LCS 240-483760/3-A	Lab Control Sample	Total Recoverable	Water	6020B	483760
240-148543-6 MS	042921NOW-12	Total Recoverable	Water	6020B	483760
240-148543-6 MSD	042921NOW-12	Total Recoverable	Water	6020B	483760

General Chemistry

Analysis Batch: 356000

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-148543-1	042921NOW-7A	Total/NA	Water	SM 2540C	
240-148543-2	042921NOW-8	Total/NA	Water	SM 2540C	
240-148543-3	042921NOW-2A	Total/NA	Water	SM 2540C	
240-148543-4	042921NOW-4A	Total/NA	Water	SM 2540C	
240-148543-5	043021NOW-10	Total/NA	Water	SM 2540C	
240-148543-6	042921NOW-12	Total/NA	Water	SM 2540C	
240-148543-7	042921NOW-13	Total/NA	Water	SM 2540C	
240-148543-8	042921FB	Total/NA	Water	SM 2540C	
240-148543-9	042921FD	Total/NA	Water	SM 2540C	
MB 180-356000/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-356000/1	Lab Control Sample	Total/NA	Water	SM 2540C	
240-148543-1 DU	042921NOW-7A	Total/NA	Water	SM 2540C	

Analysis Batch: 485669

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-148543-1	042921NOW-7A	Total/NA	Water	9056A	
240-148543-2	042921NOW-8	Total/NA	Water	9056A	

General Chemistry (Continued)

Analysis Batch: 485669 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-148543-2	042921NOW-8	Total/NA	Water	9056A	
240-148543-3	042921NOW-2A	Total/NA	Water	9056A	
240-148543-4	042921NOW-4A	Total/NA	Water	9056A	
240-148543-5	043021NOW-10	Total/NA	Water	9056A	
240-148543-6	042921NOW-12	Total/NA	Water	9056A	
240-148543-6	042921NOW-12	Total/NA	Water	9056A	
240-148543-7	042921NOW-13	Total/NA	Water	9056A	
240-148543-8	042921FB	Total/NA	Water	9056A	
240-148543-9	042921FD	Total/NA	Water	9056A	
MB 240-485669/3	Method Blank	Total/NA	Water	9056A	
LCS 240-485669/4	Lab Control Sample	Total/NA	Water	9056A	
240-148543-6 MS	042921NOW-12	Total/NA	Water	9056A	
240-148543-6 MS	042921NOW-12	Total/NA	Water	9056A	
240-148543-6 MSD	042921NOW-12	Total/NA	Water	9056A	
240-148543-6 MSD	042921NOW-12	Total/NA	Water	9056A	

Rad

Prep Batch: 509471

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-148543-1	042921NOW-7A	Total/NA	Water	PrecSep-21	
240-148543-2	042921NOW-8	Total/NA	Water	PrecSep-21	
240-148543-3	042921NOW-2A	Total/NA	Water	PrecSep-21	
240-148543-4	042921NOW-4A	Total/NA	Water	PrecSep-21	
240-148543-5	043021NOW-10	Total/NA	Water	PrecSep-21	
MB 160-509471/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-509471/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-509471/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 509474

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-148543-1	042921NOW-7A	Total/NA	Water	PrecSep_0	
240-148543-2	042921NOW-8	Total/NA	Water	PrecSep_0	
240-148543-3	042921NOW-2A	Total/NA	Water	PrecSep_0	
240-148543-4	042921NOW-4A	Total/NA	Water	PrecSep_0	
240-148543-5	043021NOW-10	Total/NA	Water	PrecSep_0	
MB 160-509474/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-509474/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-509474/2-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

Prep Batch: 509510

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-148543-6	042921NOW-12	Total/NA	Water	PrecSep-21	
240-148543-7	042921NOW-13	Total/NA	Water	PrecSep-21	
240-148543-8	042921FB	Total/NA	Water	PrecSep-21	
240-148543-9	042921FD	Total/NA	Water	PrecSep-21	
MB 160-509510/23-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-509510/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
240-148543-6 MS	042921NOW-12	Total/NA	Water	PrecSep-21	
240-148543-6 MSD	042921NOW-12	Total/NA	Water	PrecSep-21	
500-198714-G-2-B DU	Duplicate	Total/NA	Water	PrecSep-21	

QC Association Summary

Client: Dominion Energy Services, Inc.
Project/Site: Mount Storm LVWSP

Job ID: 240-148543-1

Rad

Prep Batch: 512616

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-148543-6	042921NOW-12	Total/NA	Water	PrecSep_0	
240-148543-7	042921NOW-13	Total/NA	Water	PrecSep_0	
240-148543-8	042921FB	Total/NA	Water	PrecSep_0	
240-148543-9	042921FD	Total/NA	Water	PrecSep_0	
MB 160-512616/23-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-512616/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
240-148543-6 MS	042921NOW-12	Total/NA	Water	PrecSep_0	
240-148543-6 MSD	042921NOW-12	Total/NA	Water	PrecSep_0	
500-198714-G-1-B DU	Duplicate	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Dominion Energy Services, Inc.
Project/Site: Mount Storm LVWSP

Job ID: 240-148543-1

Client Sample ID: 042921NOW-7A

Lab Sample ID: 240-148543-1

Date Collected: 04/29/21 10:10

Matrix: Water

Date Received: 05/01/21 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			483760	05/03/21 14:00	MRL	TAL CAN
Total Recoverable	Analysis	6010D		1	484159	05/04/21 21:00	KLC	TAL CAN
Total Recoverable	Prep	3005A			483760	05/03/21 14:00	MRL	TAL CAN
Total Recoverable	Analysis	6020B		1	484576	05/06/21 14:06	RKT	TAL CAN
Total/NA	Prep	7470A			483762	05/03/21 14:00	MRL	TAL CAN
Total/NA	Analysis	7470A		1	484229	05/05/21 14:03	DTN	TAL CAN
Total/NA	Analysis	9056A		1	485669	05/13/21 18:36	AGC	TAL CAN
Total/NA	Analysis	SM 2540C		1	356000	05/06/21 21:20	KMM	TAL PIT
Total/NA	Prep	PrecSep-21			509471	05/13/21 10:31	LAR	TAL SL
Total/NA	Analysis	9315		1	513131	06/07/21 12:02	SCB	TAL SL
Total/NA	Prep	PrecSep_0			509474	05/13/21 11:23	LAR	TAL SL
Total/NA	Analysis	9320		1	512659	06/03/21 13:12	ANW	TAL SL
Total/NA	Analysis	Ra226_Ra228 Pos		1	513492	06/09/21 22:00	SCB	TAL SL

Client Sample ID: 042921NOW-8

Lab Sample ID: 240-148543-2

Date Collected: 04/29/21 10:45

Matrix: Water

Date Received: 05/01/21 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			483760	05/03/21 14:00	MRL	TAL CAN
Total Recoverable	Analysis	6010D		1	484159	05/04/21 21:05	KLC	TAL CAN
Total Recoverable	Prep	3005A			483760	05/03/21 14:00	MRL	TAL CAN
Total Recoverable	Analysis	6020B		1	484576	05/06/21 14:09	RKT	TAL CAN
Total/NA	Prep	7470A			483762	05/03/21 14:00	MRL	TAL CAN
Total/NA	Analysis	7470A		1	484229	05/05/21 14:09	DTN	TAL CAN
Total/NA	Analysis	9056A		1	485669	05/13/21 18:56	AGC	TAL CAN
Total/NA	Analysis	9056A		10	485669	05/13/21 19:16	AGC	TAL CAN
Total/NA	Analysis	SM 2540C		1	356000	05/06/21 21:20	KMM	TAL PIT
Total/NA	Prep	PrecSep-21			509471	05/13/21 10:31	LAR	TAL SL
Total/NA	Analysis	9315		1	513131	06/07/21 12:02	SCB	TAL SL
Total/NA	Prep	PrecSep_0			509474	05/13/21 11:23	LAR	TAL SL
Total/NA	Analysis	9320		1	512659	06/03/21 13:12	ANW	TAL SL
Total/NA	Analysis	Ra226_Ra228 Pos		1	513492	06/09/21 22:00	SCB	TAL SL

Client Sample ID: 042921NOW-2A

Lab Sample ID: 240-148543-3

Date Collected: 04/29/21 11:15

Matrix: Water

Date Received: 05/01/21 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			483760	05/03/21 14:00	MRL	TAL CAN
Total Recoverable	Analysis	6010D		1	484159	05/04/21 21:09	KLC	TAL CAN
Total Recoverable	Prep	3005A			483760	05/03/21 14:00	MRL	TAL CAN
Total Recoverable	Analysis	6020B		1	484576	05/06/21 14:11	RKT	TAL CAN

Client Sample ID: 042921NOW-2A

Lab Sample ID: 240-148543-3

Date Collected: 04/29/21 11:15

Matrix: Water

Date Received: 05/01/21 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			483762	05/03/21 14:00	MRL	TAL CAN
Total/NA	Analysis	7470A		1	484229	05/05/21 14:11	DTN	TAL CAN
Total/NA	Analysis	9056A		1	485669	05/13/21 19:37	AGC	TAL CAN
Total/NA	Analysis	SM 2540C		1	356000	05/06/21 21:20	KMM	TAL PIT
Total/NA	Prep	PrecSep-21			509471	05/13/21 10:31	LAR	TAL SL
Total/NA	Analysis	9315		1	513131	06/07/21 12:03	SCB	TAL SL
Total/NA	Prep	PrecSep_0			509474	05/13/21 11:23	LAR	TAL SL
Total/NA	Analysis	9320		1	512659	06/03/21 13:12	ANW	TAL SL
Total/NA	Analysis	Ra226_Ra228 Pos		1	513492	06/09/21 22:00	SCB	TAL SL

Client Sample ID: 042921NOW-4A

Lab Sample ID: 240-148543-4

Date Collected: 04/29/21 15:20

Matrix: Water

Date Received: 05/01/21 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			483760	05/03/21 14:00	MRL	TAL CAN
Total Recoverable	Analysis	6010D		1	484159	05/04/21 21:22	KLC	TAL CAN
Total Recoverable	Prep	3005A			483760	05/03/21 14:00	MRL	TAL CAN
Total Recoverable	Analysis	6020B		1	484576	05/06/21 14:14	RKT	TAL CAN
Total/NA	Prep	7470A			483762	05/03/21 14:00	MRL	TAL CAN
Total/NA	Analysis	7470A		1	484229	05/05/21 14:13	DTN	TAL CAN
Total/NA	Analysis	9056A		1	485669	05/13/21 20:17	AGC	TAL CAN
Total/NA	Analysis	SM 2540C		1	356000	05/06/21 21:20	KMM	TAL PIT
Total/NA	Prep	PrecSep-21			509471	05/13/21 10:31	LAR	TAL SL
Total/NA	Analysis	9315		1	513131	06/07/21 12:02	SCB	TAL SL
Total/NA	Prep	PrecSep_0			509474	05/13/21 11:23	LAR	TAL SL
Total/NA	Analysis	9320		1	512659	06/03/21 13:12	ANW	TAL SL
Total/NA	Analysis	Ra226_Ra228 Pos		1	513492	06/09/21 22:00	SCB	TAL SL

Client Sample ID: 043021NOW-10

Lab Sample ID: 240-148543-5

Date Collected: 04/30/21 08:55

Matrix: Water

Date Received: 05/01/21 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			483760	05/03/21 14:00	MRL	TAL CAN
Total Recoverable	Analysis	6010D		1	484159	05/04/21 21:26	KLC	TAL CAN
Total Recoverable	Prep	3005A			483760	05/03/21 14:00	MRL	TAL CAN
Total Recoverable	Analysis	6020B		1	484576	05/06/21 14:16	RKT	TAL CAN
Total/NA	Prep	7470A			483762	05/03/21 14:00	MRL	TAL CAN
Total/NA	Analysis	7470A		1	484229	05/05/21 14:15	DTN	TAL CAN
Total/NA	Analysis	9056A		1	485669	05/13/21 20:37	AGC	TAL CAN
Total/NA	Analysis	SM 2540C		1	356000	05/06/21 21:20	KMM	TAL PIT
Total/NA	Prep	PrecSep-21			509471	05/13/21 10:31	LAR	TAL SL
Total/NA	Analysis	9315		1	513131	06/07/21 12:03	SCB	TAL SL

Lab Chronicle

Client: Dominion Energy Services, Inc.
Project/Site: Mount Storm LVWSP

Job ID: 240-148543-1

Client Sample ID: 043021NOW-10

Lab Sample ID: 240-148543-5

Date Collected: 04/30/21 08:55

Matrix: Water

Date Received: 05/01/21 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep_0			509474	05/13/21 11:23	LAR	TAL SL
Total/NA	Analysis	9320		1	512659	06/03/21 13:15	ANW	TAL SL
Total/NA	Analysis	Ra226_Ra228 Pos		1	513492	06/09/21 22:00	SCB	TAL SL

Client Sample ID: 042921NOW-12

Lab Sample ID: 240-148543-6

Date Collected: 04/29/21 16:50

Matrix: Water

Date Received: 05/01/21 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			483760	05/03/21 14:00	MRL	TAL CAN
Total Recoverable	Analysis	6010D		1	484159	05/04/21 19:43	KLC	TAL CAN
Total Recoverable	Prep	3005A			483760	05/03/21 14:00	MRL	TAL CAN
Total Recoverable	Analysis	6020B		1	484576	05/06/21 13:13	RKT	TAL CAN
Total/NA	Prep	7470A			483762	05/03/21 14:00	MRL	TAL CAN
Total/NA	Analysis	7470A		1	484229	05/05/21 13:09	DTN	TAL CAN
Total/NA	Analysis	9056A		1	485669	05/13/21 20:57	AGC	TAL CAN
Total/NA	Analysis	9056A		5	485669	05/13/21 22:38	AGC	TAL CAN
Total/NA	Analysis	SM 2540C		1	356000	05/06/21 21:20	KMM	TAL PIT
Total/NA	Prep	PrecSep-21			509510	05/13/21 15:59	LAR	TAL SL
Total/NA	Analysis	9315		1	513127	06/07/21 12:06	AK	TAL SL
Total/NA	Prep	PrecSep_0			512616	06/03/21 11:26	MLO	TAL SL
Total/NA	Analysis	9320		1	513626	06/10/21 09:25	AK	TAL SL
Total/NA	Analysis	Ra226_Ra228 Pos		1	513789	06/11/21 12:04	SCB	TAL SL

Client Sample ID: 042921NOW-13

Lab Sample ID: 240-148543-7

Date Collected: 04/29/21 12:35

Matrix: Water

Date Received: 05/01/21 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			483760	05/03/21 14:00	MRL	TAL CAN
Total Recoverable	Analysis	6010D		1	484159	05/04/21 21:31	KLC	TAL CAN
Total Recoverable	Prep	3005A			483760	05/03/21 14:00	MRL	TAL CAN
Total Recoverable	Analysis	6020B		1	484576	05/06/21 14:19	RKT	TAL CAN
Total/NA	Prep	7470A			483762	05/03/21 14:00	MRL	TAL CAN
Total/NA	Analysis	7470A		1	484229	05/05/21 14:17	DTN	TAL CAN
Total/NA	Analysis	9056A		1	485669	05/13/21 23:38	AGC	TAL CAN
Total/NA	Analysis	SM 2540C		1	356000	05/06/21 21:20	KMM	TAL PIT
Total/NA	Prep	PrecSep-21			509510	05/13/21 15:59	LAR	TAL SL
Total/NA	Analysis	9315		1	513127	06/07/21 12:06	AK	TAL SL
Total/NA	Prep	PrecSep_0			512616	06/03/21 11:26	MLO	TAL SL
Total/NA	Analysis	9320		1	513626	06/10/21 09:25	AK	TAL SL
Total/NA	Analysis	Ra226_Ra228 Pos		1	513789	06/11/21 12:04	SCB	TAL SL

Lab Chronicle

Client: Dominion Energy Services, Inc.
Project/Site: Mount Storm LVWSP

Job ID: 240-148543-1

Client Sample ID: 042921FB

Date Collected: 04/29/21 09:10
Date Received: 05/01/21 10:20

Lab Sample ID: 240-148543-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			483760	05/03/21 14:00	MRL	TAL CAN
Total Recoverable	Analysis	6010D		1	484159	05/04/21 21:35	KLC	TAL CAN
Total Recoverable	Prep	3005A			483760	05/03/21 14:00	MRL	TAL CAN
Total Recoverable	Analysis	6020B		1	484576	05/06/21 14:21	RKT	TAL CAN
Total/NA	Prep	7470A			483762	05/03/21 14:00	MRL	TAL CAN
Total/NA	Analysis	7470A		1	484229	05/05/21 14:19	DTN	TAL CAN
Total/NA	Analysis	9056A		1	485669	05/13/21 23:58	AGC	TAL CAN
Total/NA	Analysis	SM 2540C		1	356000	05/06/21 21:20	KMM	TAL PIT
Total/NA	Prep	PrecSep-21			509510	05/13/21 15:59	LAR	TAL SL
Total/NA	Analysis	9315		1	513127	06/07/21 13:52	AK	TAL SL
Total/NA	Prep	PrecSep_0			512616	06/03/21 11:26	MLO	TAL SL
Total/NA	Analysis	9320		1	513626	06/10/21 09:25	AK	TAL SL
Total/NA	Analysis	Ra226_Ra228 Pos		1	513789	06/11/21 12:04	SCB	TAL SL

Client Sample ID: 042921FD

Date Collected: 04/29/21 15:30
Date Received: 05/01/21 10:20

Lab Sample ID: 240-148543-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			483760	05/03/21 14:00	MRL	TAL CAN
Total Recoverable	Analysis	6010D		1	484159	05/04/21 21:39	KLC	TAL CAN
Total Recoverable	Prep	3005A			483760	05/03/21 14:00	MRL	TAL CAN
Total Recoverable	Analysis	6020B		1	484576	05/06/21 14:24	RKT	TAL CAN
Total/NA	Prep	7470A			483762	05/03/21 14:00	MRL	TAL CAN
Total/NA	Analysis	7470A		1	484229	05/05/21 14:21	DTN	TAL CAN
Total/NA	Analysis	9056A		1	485669	05/14/21 00:18	AGC	TAL CAN
Total/NA	Analysis	SM 2540C		1	356000	05/06/21 21:20	KMM	TAL PIT
Total/NA	Prep	PrecSep-21			509510	05/13/21 15:59	LAR	TAL SL
Total/NA	Analysis	9315		1	513127	06/07/21 13:51	AK	TAL SL
Total/NA	Prep	PrecSep_0			512616	06/03/21 11:26	MLO	TAL SL
Total/NA	Analysis	9320		1	513626	06/10/21 09:25	AK	TAL SL
Total/NA	Analysis	Ra226_Ra228 Pos		1	513789	06/11/21 12:04	SCB	TAL SL

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396
TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058
TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Accreditation/Certification Summary

Client: Dominion Energy Services, Inc. Job ID: 240-148543-1
Project/Site: Mount Storm LVWSP

Laboratory: Eurofins TestAmerica, Canton

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
West Virginia DEP	State	210	12-31-21

Laboratory: Eurofins TestAmerica, Pittsburgh

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
West Virginia DEP	State	142	01-31-22

Laboratory: Eurofins TestAmerica, St. Louis

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
West Virginia DEP	State	381	10-31-21

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
Ra226_Ra228 Pos		Water	Radium 226 and 228

Eurofins TestAmerica, Canton
4101 Shuffel Street NW

North Canton, OH 44720-6900
phone 330.497.9396 fax 330.497.0772

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☑ Other:

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact	Project Manager: Rachel Powell	Site Contact: Rachel Powell	Date:	COC No: MSPS-1SA21-LVWSP-D-
Golder Associates Inc.	Email: ripowell@golder.com	Lab Contact: Roxanne Cisneros	Carrier: FEDEX	1 of 1 COCs
2108 West Laburnum Ave, Suite 200	Tel/Fax: 804-517-3381			TALS Project #:
Richmond/VA/USA	Analysis Turnaround Time			Sampler: John England / Collin Megee
(804) 358-7900 Phone	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
(804) 517-3381 Cell	TAT if different from Below STANDARD			Walk-in Client:
Project Name: Mt. Storm LVWSP	☐ 2 weeks			Lab Sampling:
Site: Mt. Storm, WV	☐ 1 week			Job / SDG No.:
P O # 50153540	☐ 2 days ☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	TDS	Cl-, Fl-, SO4 - 9056A	B, Ca, Sb, As, Ba, Be, Cd, Cr, Co	Pb, Li, Hg, Mo, Se, Tl	Radium 226, 228, Total - 9000	Sample Specific Notes:
04 29 21NOW-7A	4/29/21	1010	G	GW	5	N		X	X	X	X	X	
04 29 21NOW-8	4/29/21	1045 1115	G	GW	5	N		X	X	X	X	X	
04 29 21NOW-2A	4/29/21	1115	G	GW	5	N		X	X	X	X	X	
04 29 21NOW-4A	4/29/21	1520	G	GW	5	N		X	X	X	X	X	
04 30 21NOW-10	4/30/21	0855	G	GW	5	N		X	X	X	X	X	
04 29 21NOW-12	4/29/21	1650	G	GW	15	N		X	X	X	X	X	MS/MSD Sampled
04 29 21NOW-13	4/29/21	1235	G	GW	5	N		X	X	X	X	X	
04 29 21FB	4/29/21	0910	G	W	5	N		X	X	X	X	X	
04 29 21FD	4/29/21	1530	G	GW	5	N		X	X	X	X	X	
								1	1	4	4	4	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☑ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments: All samples preserved on ice. Level II Data Package requested. Please see reporting group D for additonal details.

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd:_____ Corr'd:_____		Therm ID No.:_____
Relinquished by:	Company: Golder Associates Inc.	Date/Time: 4/30/2021 1600	Received by: MJS ETA CANTON	Company: MAY 01 2021	Date/Time: 1020
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Eurofins TestAmerica Canton Sample Receipt Form/Narrative **Login # : 240-148543**
Canton Facility

Client Golder Associates Site Name _____ Cooler unpacked by: MJS ETA CANTON

Cooler Received on MAY 01 2021 Opened on MAY 01 2021

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # 74 Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☑ See Multiple Cooler Form
   IR GUN# IR-11 (CF +0.1 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
   IR GUN #IR-12 (CF +0.2°C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 5	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3. Shippers' packing slip attached to the cooler(s)?	Yes	No
4. Did custody papers accompany the sample(s)?	Yes	No
5. Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7. Did all bottles arrive in good condition (Unbroken)?	Yes	No
8. Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes	No
9. For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp(Y/N)?		
10. Were correct bottle(s) used for the test(s) indicated?	Yes	No
11. Sufficient quantity received to perform indicated analyses?	Yes	No
12. Are these work share samples and all listed on the COC?	Yes	No
If yes, Questions 13-17 have been checked at the originating laboratory.		
13. Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC022887
14. Were VOAs on the COC?	Yes	No
15. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	Yes	No NA
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #_____	Yes	No
17. Was a LL Hg or Me Hg trip blank present? _____	Yes	No

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Samples processed by:

19. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

VOA Sample Preservation - Date/Time VOAs Frozen: _____

Login Container Summary Report

Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservative Added (mls)	Lot #
0429 21NOW-7A	240-148543-C-1	Plastic 500ml - with Nitric Acid	<2			
0429 21NOW-7A	240-148543-D-1	Plastic 1 liter - Nitric Acid	<2			
0429 21NOW-7A	240-148543-E-1	Plastic 1 liter - Nitric Acid	<2			
0429 21NOW-8	240-148543-C-2	Plastic 500ml - with Nitric Acid	<2			
0429 21NOW-8	240-148543-D-2	Plastic 1 liter - Nitric Acid	<2			
0429 21NOW-8	240-148543-E-2	Plastic 1 liter - Nitric Acid	<2			
0429 21NOW-2A	240-148543-C-3	Plastic 500ml - with Nitric Acid	<2			
0429 21NOW-2A	240-148543-D-3	Plastic 1 liter - Nitric Acid	<2			
0429 21NOW-2A	240-148543-E-3	Plastic 1 liter - Nitric Acid	<2			
0429 21NOW-4A	240-148543-C-4	Plastic 500ml - with Nitric Acid	<2			
0429 21NOW-4A	240-148543-D-4	Plastic 1 liter - Nitric Acid	<2			
0429 21NOW-4A	240-148543-E-4	Plastic 1 liter - Nitric Acid	<2			
0429 21NOW-10	240-148543-C-5	Plastic 500ml - with Nitric Acid	<2			
0429 21NOW-10	240-148543-D-5	Plastic 1 liter - Nitric Acid	<2			
0429 21NOW-10	240-148543-E-5	Plastic 1 liter - Nitric Acid	<2			
0429 21NOW-12	240-148543-G-6	Plastic 500ml - with Nitric Acid	<2			
0429 21NOW-12	240-148543-H-6	Plastic 500ml - with Nitric Acid	<2			
0429 21NOW-12	240-148543-I-6	Plastic 500ml - with Nitric Acid	<2			
0429 21NOW-12	240-148543-J-6	Plastic 1 liter - Nitric Acid	<2			
0429 21NOW-12	240-148543-K-6	Plastic 1 liter - Nitric Acid	<2			
0429 21NOW-12	240-148543-L-6	Plastic 1 liter - Nitric Acid	<2			
0429 21NOW-12	240-148543-M-6	Plastic 1 liter - Nitric Acid	<2			
0429 21NOW-12	240-148543-N-6	Plastic 1 liter - Nitric Acid	<2			
0429 21NOW-12	240-148543-O-6	Plastic 1 liter - Nitric Acid	<2			
0429 21NOW-13	240-148543-C-7	Plastic 500ml - with Nitric Acid	<2			
0429 21NOW-13	240-148543-D-7	Plastic 1 liter - Nitric Acid	<2			
0429 21NOW-13	240-148543-E-7	Plastic 1 liter - Nitric Acid	<2			
0429 21FB	240-148543-C-8	Plastic 500ml - with Nitric Acid	<2			
0429 21FB	240-148543-D-8	Plastic 1 liter - Nitric Acid	<2			
0429 21FB	240-148543-E-8	Plastic 1 liter - Nitric Acid	<2			
0429 21FD	240-148543-C-9	Plastic 500ml - with Nitric Acid	<2			
0429 21FD	240-148543-D-9	Plastic 1 liter - Nitric Acid	<2			
0429 21FD	240-148543-E-9	Plastic 1 liter - Nitric Acid	<2			

Eurofins TestAmerica Canton Sample Receipt Multiple Cooler Form				
Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
TA Client Box Other	IR-11 IR-12	0.5	0.6	Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-11 IR-12	0.6	0.7	Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-11 IR-12	1.7	1.8	Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-11 IR-12	3.2	3.3	Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-11 IR-12	0.4	0.5	Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-11 IR-12			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-11 IR-12			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-11 IR-12			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-11 IR-12			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-11 IR-12			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-11 IR-12			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-11 IR-12			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-11 IR-12			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-11 IR-12			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-11 IR-12			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-11 IR-12			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-11 IR-12			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-11 IR-12			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-11 IR-12			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-11 IR-12			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-11 IR-12			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-11 IR-12			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-11 IR-12			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-11 IR-12			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-11 IR-12			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-11 IR-12			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-11 IR-12			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-11 IR-12			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-11 IR-12			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-11 IR-12			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-11 IR-12			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-11 IR-12			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-11 IR-12			Wet Ice Blue Ice Dry Ice Water None
				☐ See Temperature Excursion Form

WI-NC-099 Cooler Receipt Form Page 2 - Multiple Coolers


RT 98
FZ

eurofins | Environment Testing TestAmerica

Part # 159470-43 REV EXP 07/21

ORIGIN ID: (330) 312-0176
EUROFINS TESTAMERICA CANTON
4101 SHUFFEL STREET NW
NORTH CANTON, OH 44720690
UNITED STATES US

SHIP DATE: 03MAY21
ACTWGT: 34.25 LB
CAD: 0562057/CAFE3409

BILL THIRD PARTY

TO ENVIRONMENTAL SAMPLE RECEIPT
TESTAMERICA PITTSBURGH
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
DEPT: AL HAIDET

FedEx Express

TRK# 0201 9148 7503 9332

TUE - 04 MAY 10:30A
PRIORITY OVERNIGHT

65 AGCA

15238
PA-US PIT

Uncorrected temp 3.2 °C
Thermometer ID 14
CF 0 Initials

PT-WI-SR-001 effective 11/8/18

240-145343 Waybill

Eurofins TestAmerica, Canton
4101 Shuffel Street NW
North Canton, OH 44720
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s):	COC No: 240-135920.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: roxanne.cisneros@Eurofinset.com	State of Origin: West Virginia	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - West Virginia DEP		Job #: 240-148543-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 6/7/2021			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: Mount Storm LVWSP	Project #: 24021758			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226/PrecSep_21 Standard Target List	9320_Ra228/PrecSep_0 Standard Target List	Ra226_228GFPC_P/ Combined Radium-226 and Radium-228	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
042921NOW-7A (240-148543-1)	4/29/21	10:10 Eastern		Water			X	X	X	2	
042921NOW-8 (240-148543-2)	4/29/21	10:45 Eastern		Water			X	X	X	2	
042921NOW-2A (240-148543-3)	4/29/21	11:15 Eastern		Water			X	X	X	2	
042921NOW-4A (240-148543-4)	4/29/21	15:20 Eastern		Water			X	X	X	2	
042921NOW-10 (240-148543-5)	4/29/21	08:55 Eastern		Water			X	X	X	2	
042921NOW-12 (240-148543-6)	4/29/21	16:50 Eastern		Water			X	X	X	6	
042921NOW-13 (240-148543-7)	4/29/21	12:35 Eastern		Water			X	X	X	2	
042921FB (240-148543-8)	4/29/21	09:10 Eastern		Water			X	X	X	2	
042921FD (240-148543-9)	4/29/21	15:30 Eastern		Water			X	X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	4-5-21 1452	ETA	FED EX		
2	FED EX	Date/Time:	Company	Received by: [signature]	Date/Time: MAY 04 2021	Company ETA SD
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 09:55	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 11.01.2020

Eurofins TestAmerica, Canton
4101 Shuffel Street NW
North Canton, OH 44720
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing America

240-148543 Chain of Custody

98.1

1

240-148543-1

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Cisneros, Roxanne
Client Contact: Shipping/Receiving	Phone:	E-Mail: roxanne.cisneros@Eurofinse
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - West Virginia DEP
Address: 301 Alpha Drive, RIDC Park,	Due Date Requested: 6/7/2021	
City: Pittsburgh	TAT Requested (days):	
State, Zip: PA, 15238		
Phone: 412-963-7058(Tel) 412-963-2468(Fax)	PO #:	
Email:	WO #:	
Project Name: Mount Storm LVWSP	Project #: 24021758	
Site:	SSOW#:	

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	2540C_Calcd/TDS	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
042921NOW-7A (240-148543-1)	4/29/21	10:10 Eastern		Water			X	1	
042921NOW-8 (240-148543-2)	4/29/21	10:45 Eastern		Water			X	1	
042921NOW-2A (240-148543-3)	4/29/21	11:15 Eastern		Water			X	1	
042921NOW-4A (240-148543-4)	4/29/21	15:20 Eastern		Water			X	1	
042921NOW-10 (240-148543-5)	4/29/21	08:55 Eastern		Water			X	1	
042921NOW-12 (240-148543-6)	4/29/21	16:50 Eastern		Water			X	3	
042921NOW-13 (240-148543-7)	4/29/21	12:35 Eastern		Water			X	1	
042921FB (240-148543-8)	4/29/21	09:10 Eastern		Water			X	1	
042921FD (240-148543-9)	4/29/21	15:30 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	5-3-21 1028	EMA		5-4-21 900	ETAPH
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 11/01/2020

Login Sample Receipt Checklist

Client: Dominion Energy Services, Inc.

Job Number: 240-148543-1

Login Number: 148543
List Number: 3
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh
List Creation: 05/04/21 02:49 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Dominion Energy Services, Inc.

Job Number: 240-148543-1

Login Number: 148543
List Number: 2
Creator: Mazariegos, Leonel A

List Source: Eurofins TestAmerica, St. Louis
List Creation: 05/04/21 11:50 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Dominion Energy Services, Inc.

Job Number: 240-148543-1

Login Number: 148543
List Number: 4
Creator: Mazariegos, Leonel A

List Source: Eurofins TestAmerica, St. Louis
List Creation: 05/06/21 04:43 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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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:

Mount Storm Power Station Groundwater Sampling
Samples Collected between: 4/29/2021 and 4/30/2021

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:

2401485431

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	Anayte	T/D	Result	Qual	Reason Code(s)	MDL	QL	Uncertainty	Unit
042921NOW-7A	OW-7A	N	CALC	Radium-226/228	N	0.595	U	S,BF			0.325	pCi/L
042921NOW-7A	OW-7A	N	SW-846 9315	Radium-226	N	0.368	U	BF	0.368	1.00	0.146	pCi/L
042921NOW-8	OW-8	N	CALC	Radium-226/228	N	0.575	U	S,BF			0.425	pCi/L
042921NOW-8	OW-8	N	SW-846 9315	Radium-226	N	0.186	U	BF	0.186	1.00	0.136	pCi/L
042921NOW-2A	OW-2A	N	CALC	Radium-226/228	N	1.05	J	S			0.554	pCi/L
042921NOW-2A	OW-2A	N	SW-846 6010D	Boron	T	81	J	RL	23	100		ug/L
042921NOW-2A	OW-2A	N	SW-846 6020B	Arsenic	T	0.84	J	RL	0.75	5.0		ug/L
042921NOW-2A	OW-2A	N	SW-846 6020B	Lead	T	0.47	J	RL	0.45	1.0		ug/L
042921NOW-2A	OW-2A	N	SW-846 6020B	Molybdenum	T	3.5	J	RL	1.1	10		ug/L
042921NOW-4A	OW-4A	N	CALC	Radium-226/228	N	0.393	U	S,BF			0.315	pCi/L
042921NOW-4A	OW-4A	N	SW-846 6010D	Boron	T	42	J	RL	23	100		ug/L
042921NOW-4A	OW-4A	N	SW-846 6020B	Arsenic	T	1.7	J	RL	0.75	5.0		ug/L
042921NOW-4A	OW-4A	N	SW-846 6020B	Cobalt	T	0.73	J	RL	0.19	1.0		ug/L
042921NOW-4A	OW-4A	N	SW-846 6020B	Lithium	T	2.8	J	RL	1.7	8.0		ug/L
042921NOW-4A	OW-4A	N	SW-846 9315	Radium-226	N	0.212	U	BF	0.212	1.00	0.132	pCi/L
043021NOW-10	OW-10	N	SW-846 6010D	Boron	T	49	J	RL	23	100		ug/L
043021NOW-10	OW-10	N	SW-846 6020B	Lithium	T	7.9	J	RL	1.7	8.0		ug/L
042921NOW-12	OW-12	N	CALC	Radium-226/228	N	0.463	U	S,BF			0.307	pCi/L
042921NOW-12	OW-12	N	SW-846 6020B	Arsenic	T	3.1	J	RL	0.75	5.0		ug/L
042921NOW-12	OW-12	N	SW-846 6020B	Beryllium	T	0.46	J	RL	0.31	1.0		ug/L
042921NOW-12	OW-12	N	SW-846 6020B	Cadmium	T	0.20	J	RL	0.20	1.0		ug/L
042921NOW-12	OW-12	N	SW-846 6020B	Lithium	T	6.1	J	RL	1.7	8.0		ug/L
042921NOW-12	OW-12	N	SW-846 6020B	Molybdenum	T	8.5	J	RL	1.1	10		ug/L
042921NOW-12	OW-12	N	SW-846 6020B	Thallium	T	0.35	J	RL	0.20	1.0		ug/L
042921NOW-12	OW-12	N	SW-846 9315	Radium-226	N	0.198	U	BF	0.198	1.00	0.101	pCi/L
042921NOW-13	OW-13	N	CALC	Radium-226/228	N	1.48	J	S,Y			0.674	pCi/L
042921NOW-13	OW-13	N	SW-846 6020B	Lithium	T	3.9	J	RL	1.7	8.0		ug/L
042921NOW-13	OW-13	N	SW-846 6020B	Selenium	T	1.3	J	RL	0.89	5.0		ug/L
042921NOW-13	OW-13	N	SW-846 9315	Radium-226	N	0.365	UJ	Y	0.366	1.00	0.260	pCi/L
042921FB		FB	CALC	Radium-226/228	N	0.297	J	S			0.240	pCi/L

Sample	Location	Sample Type	Method	Anayte	T/D	Result	Qual	Reason Code(s)	MDL	QL	Uncertainty	Unit
042921FD	OW-4A	FD	CALC	Radium-226/228	N	0.757	J	BF			0.295	pCi/L
042921FD	OW-4A	FD	SW-846 6010D	Boron	T	40	J	RL	23	100		ug/L
042921FD	OW-4A	FD	SW-846 6020B	Arsenic	T	0.82	J	RL	0.75	5.0		ug/L
042921FD	OW-4A	FD	SW-846 6020B	Cobalt	T	0.62	J	RL	0.19	1.0		ug/L
042921FD	OW-4A	FD	SW-846 6020B	Lithium	T	2.6	J	RL	1.7	8.0		ug/L
042921FD	OW-4A	FD	SW-846 9315	Radium-226	N	0.260	U	BF	0.260	1.00	0.120	pCi/L

Data Qualifiers	
U	The analyte was analyzed was not detected above the level of the reported sample quantitation 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	This analyte was not detected, but the reporting limit may or may not be higher due to a bias identified during data validation.
R	Unreliable positive result; analyte may or may not be present in sample.
Reason Codes and Explanations	
BE	Equipment blank contamination. The result should be considered “not-detected.”
BF	Field blank contamination. The result should be considered “not-detected.”
BL	Laboratory blank contamination. The result should be considered “not-detected.”
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 RL.
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: Mount Storm Power Station
SDG: 2401485431

Lab Sample ID	240-148543-1
Sys Sample Code	042921NOW-7A
Sample Name	042921NOW-7A
Sample Date	4/29/2021 10:10:00 AM
Location	OW-7A / OW-7A
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	Radium-226/228	RA226/228	N	pCi/L	0.595	U	S,BF	0.325				N	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	230				10	10	10	Y	Yes	1	NA
SW-846 6010D	Boron	7440-42-8	T	ug/L		U			23	23	100	N	Yes	1	NA
SW-846 6020B	Antimony	7440-36-0	T	ug/L		U			0.57	0.57	2.0	N	Yes	1	NA
	Arsenic	7440-38-2	T	ug/L		U			0.75	0.75	5.0	N	Yes	1	NA
	Barium	7440-39-3	T	ug/L	290				2.2	2.2	5.0	Y	Yes	1	NA
	Beryllium	7440-41-7	T	ug/L		U			0.31	0.31	1.0	N	Yes	1	NA
	Cadmium	7440-43-9	T	ug/L		U			0.20	0.20	1.0	N	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	42000				580	580	1000	Y	Yes	1	NA
	Chromium	7440-47-3	T	ug/L		U			0.98	0.98	2.0	N	Yes	1	NA
	Cobalt	7440-48-4	T	ug/L	3.1				0.19	0.19	1.0	Y	Yes	1	NA
	Lead	7439-92-1	T	ug/L		U			0.45	0.45	1.0	N	Yes	1	NA
	Lithium	7439-93-2	T	ug/L	16				1.7	1.7	8.0	Y	Yes	1	NA
	Molybdenum	7439-98-7	T	ug/L		U			1.1	1.1	10	N	Yes	1	NA
	Selenium	7782-49-2	T	ug/L		U			0.89	0.89	5.0	N	Yes	1	NA
	Thallium	7440-28-0	T	ug/L		U			0.20	0.20	1.0	N	Yes	1	NA
SW-846 7470A	Mercury	7439-97-6	T	ug/L		U			0.13	0.13	0.20	N	Yes	1	NA
SW-846 9056A	Chloride	16887-00-6	N	mg/L	93				0.28	0.28	1.0	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L	0.17				0.024	0.024	0.050	Y	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	9.9				0.35	0.35	1.0	Y	Yes	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	0.368	U	BF	0.146	0.368	0.368	1.00	N	Yes	1	NA
SW-846 9320	Radium-228	15262-20-1	N	pCi/L	0.228	U		0.290	0.481	0.481	1.00	N	Yes	1	NA

Lab Sample ID	240-148543-2
Sys Sample Code	042921NOW-8
Sample Name	042921NOW-8
Sample Date	4/29/2021 10:45:00 AM
Location	OW-8 / OW-8
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	Radium-226/228	RA226/228	N	pCi/L	0.575	U	S,BF	0.425				N	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	1800				10	10	10	Y	Yes	1	NA
SW-846 6010D	Boron	7440-42-8	T	ug/L	100				23	23	100	Y	Yes	1	NA
SW-846 6020B	Antimony	7440-36-0	T	ug/L		U			0.57	0.57	2.0	N	Yes	1	NA
	Arsenic	7440-38-2	T	ug/L		U			0.75	0.75	5.0	N	Yes	1	NA
	Barium	7440-39-3	T	ug/L	8.7				2.2	2.2	5.0	Y	Yes	1	NA
	Beryllium	7440-41-7	T	ug/L		U			0.31	0.31	1.0	N	Yes	1	NA
	Cadmium	7440-43-9	T	ug/L		U			0.20	0.20	1.0	N	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	390000				580	580	1000	Y	Yes	1	NA
	Chromium	7440-47-3	T	ug/L		U			0.98	0.98	2.0	N	Yes	1	NA
	Cobalt	7440-48-4	T	ug/L	32				0.19	0.19	1.0	Y	Yes	1	NA
	Lead	7439-92-1	T	ug/L		U			0.45	0.45	1.0	N	Yes	1	NA
	Lithium	7439-93-2	T	ug/L	12				1.7	1.7	8.0	Y	Yes	1	NA
	Molybdenum	7439-98-7	T	ug/L		U			1.1	1.1	10	N	Yes	1	NA
	Selenium	7782-49-2	T	ug/L		U			0.89	0.89	5.0	N	Yes	1	NA
	Thallium	7440-28-0	T	ug/L		U			0.20	0.20	1.0	N	Yes	1	NA
SW-846 7470A	Mercury	7439-97-6	T	ug/L		U			0.13	0.13	0.20	N	Yes	1	NA
SW-846 9056A	Chloride	16887-00-6	N	mg/L	260				2.8	2.8	10	Y	Yes	10	NA
	Fluoride	16984-48-8	N	mg/L	0.12				0.024	0.024	0.050	Y	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	930				3.5	3.5	10	Y	Yes	10	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	0.186	U	BF	0.136	0.186	0.186	1.00	N	Yes	1	NA
SW-846 9320	Radium-228	15262-20-1	N	pCi/L	0.389	U		0.403	0.654	0.654	1.00	N	Yes	1	NA

Facility: Mount Storm Power Station
SDG: 2401485431

Lab Sample ID	240-148543-3
Sys Sample Code	042921NOW-2A
Sample Name	042921NOW-2A
Sample Date	4/29/2021 11:15:00 AM
Location	OW-2A / OW-2A
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	Radium-226/228	RA226/228	N	pCi/L	1.05	J	S	0.554				Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	480				10	10	10	Y	Yes	1	NA
SW-846 6010D	Boron	7440-42-8	T	ug/L	81	J	RL		23	23	100	Y	Yes	1	NA
SW-846 6020B	Antimony	7440-36-0	T	ug/L		U			0.57	0.57	2.0	N	Yes	1	NA
	Arsenic	7440-38-2	T	ug/L	0.84	J	RL		0.75	0.75	5.0	Y	Yes	1	NA
	Barium	7440-39-3	T	ug/L	250				2.2	2.2	5.0	Y	Yes	1	NA
	Beryllium	7440-41-7	T	ug/L		U			0.31	0.31	1.0	N	Yes	1	NA
	Cadmium	7440-43-9	T	ug/L	1.1				0.20	0.20	1.0	Y	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	110000				580	580	1000	Y	Yes	1	NA
	Chromium	7440-47-3	T	ug/L		U			0.98	0.98	2.0	N	Yes	1	NA
	Cobalt	7440-48-4	T	ug/L	25				0.19	0.19	1.0	Y	Yes	1	NA
	Lead	7439-92-1	T	ug/L	0.47	J	RL		0.45	0.45	1.0	Y	Yes	1	NA
	Lithium	7439-93-2	T	ug/L	8.8				1.7	1.7	8.0	Y	Yes	1	NA
	Molybdenum	7439-98-7	T	ug/L	3.5	J	RL		1.1	1.1	10	Y	Yes	1	NA
	Selenium	7782-49-2	T	ug/L		U			0.89	0.89	5.0	N	Yes	1	NA
	Thallium	7440-28-0	T	ug/L		U			0.20	0.20	1.0	N	Yes	1	NA
SW-846 7470A	Mercury	7439-97-6	T	ug/L		U			0.13	0.13	0.20	N	Yes	1	NA
SW-846 9056A	Chloride	16887-00-6	N	mg/L	26				0.28	0.28	1.0	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L	0.24				0.024	0.024	0.050	Y	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	160				0.35	0.35	1.0	Y	Yes	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	0.492			0.227	0.245	0.245	1.00	Y	Yes	1	NA
SW-846 9320	Radium-228	15262-20-1	N	pCi/L	0.559	U		0.505	0.806	0.806	1.00	N	Yes	1	NA

Facility: Mount Storm Power Station
SDG: 2401485431

Lab Sample ID	240-148543-4
Sys Sample Code	042921NOW-4A
Sample Name	042921NOW-4A
Sample Date	4/29/2021 3:20:00 PM
Location	OW-4A / OW-4A
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	Radium-226/228	RA226/228	N	pCi/L	0.393	U	S,BF	0.315				N	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	100				10	10	10	Y	Yes	1	NA
SW-846 6010D	Boron	7440-42-8	T	ug/L	42	J	RL		23	23	100	Y	Yes	1	NA
SW-846 6020B	Antimony	7440-36-0	T	ug/L		U			0.57	0.57	2.0	N	Yes	1	NA
	Arsenic	7440-38-2	T	ug/L	1.7	J	RL		0.75	0.75	5.0	Y	Yes	1	NA
	Barium	7440-39-3	T	ug/L	78				2.2	2.2	5.0	Y	Yes	1	NA
	Beryllium	7440-41-7	T	ug/L		U			0.31	0.31	1.0	N	Yes	1	NA
	Cadmium	7440-43-9	T	ug/L		U			0.20	0.20	1.0	N	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	22000				580	580	1000	Y	Yes	1	NA
	Chromium	7440-47-3	T	ug/L		U			0.98	0.98	2.0	N	Yes	1	NA
	Cobalt	7440-48-4	T	ug/L	0.73	J	RL		0.19	0.19	1.0	Y	Yes	1	NA
	Lead	7439-92-1	T	ug/L		U			0.45	0.45	1.0	N	Yes	1	NA
	Lithium	7439-93-2	T	ug/L	2.8	J	RL		1.7	1.7	8.0	Y	Yes	1	NA
	Molybdenum	7439-98-7	T	ug/L		U			1.1	1.1	10	N	Yes	1	NA
	Selenium	7782-49-2	T	ug/L		U			0.89	0.89	5.0	N	Yes	1	NA
	Thallium	7440-28-0	T	ug/L		U			0.20	0.20	1.0	N	Yes	1	NA
SW-846 7470A	Mercury	7439-97-6	T	ug/L		U			0.13	0.13	0.20	N	Yes	1	NA
SW-846 9056A	Chloride	16887-00-6	N	mg/L	5.2				0.28	0.28	1.0	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L	0.088				0.024	0.024	0.050	Y	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	46				0.35	0.35	1.0	Y	Yes	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	0.212	U	BF	0.132	0.212	0.212	1.00	N	Yes	1	NA
SW-846 9320	Radium-228	15262-20-1	N	pCi/L	0.181	U		0.286	0.481	0.481	1.00	N	Yes	1	NA

Lab Sample ID	240-148543-5
Sys Sample Code	043021NOW-10
Sample Name	043021NOW-10
Sample Date	4/30/2021 8:55:00 AM
Location	OW-10 / OW-10
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	Radium-226/228	RA226/228	N	pCi/L	0.379	U		0.309				N	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	170				10	10	10	Y	Yes	1	NA
SW-846 6010D	Boron	7440-42-8	T	ug/L	49	J	RL		23	23	100	Y	Yes	1	NA
SW-846 6020B	Antimony	7440-36-0	T	ug/L		U			0.57	0.57	2.0	N	Yes	1	NA
	Arsenic	7440-38-2	T	ug/L		U			0.75	0.75	5.0	N	Yes	1	NA
	Barium	7440-39-3	T	ug/L	270				2.2	2.2	5.0	Y	Yes	1	NA
	Beryllium	7440-41-7	T	ug/L		U			0.31	0.31	1.0	N	Yes	1	NA
	Cadmium	7440-43-9	T	ug/L		U			0.20	0.20	1.0	N	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	43000				580	580	1000	Y	Yes	1	NA
	Chromium	7440-47-3	T	ug/L		U			0.98	0.98	2.0	N	Yes	1	NA
	Cobalt	7440-48-4	T	ug/L		U			0.19	0.19	1.0	N	Yes	1	NA
	Lead	7439-92-1	T	ug/L		U			0.45	0.45	1.0	N	Yes	1	NA
	Lithium	7439-93-2	T	ug/L	7.9	J	RL		1.7	1.7	8.0	Y	Yes	1	NA
	Molybdenum	7439-98-7	T	ug/L		U			1.1	1.1	10	N	Yes	1	NA
	Selenium	7782-49-2	T	ug/L		U			0.89	0.89	5.0	N	Yes	1	NA
	Thallium	7440-28-0	T	ug/L		U			0.20	0.20	1.0	N	Yes	1	NA
SW-846 7470A	Mercury	7439-97-6	T	ug/L		U			0.13	0.13	0.20	N	Yes	1	NA
SW-846 9056A	Chloride	16887-00-6	N	mg/L	7.7				0.28	0.28	1.0	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L	0.26				0.024	0.024	0.050	Y	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	9.1				0.35	0.35	1.0	Y	Yes	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	0.128	U		0.112	0.168	0.168	1.00	N	Yes	1	NA
SW-846 9320	Radium-228	15262-20-1	N	pCi/L	0.252	U		0.288	0.472	0.472	1.00	N	Yes	1	NA

Facility: Mount Storm Power Station
SDG: 2401485431

Lab Sample ID	240-148543-6
Sys Sample Code	042921NOW-12
Sample Name	042921NOW-12
Sample Date	4/29/2021 4:50:00 PM
Location	OW-12 / OW-12
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	Radium-226/228	RA226/228	N	pCi/L	0.463	U	S,BF	0.307				N	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	720				10	10	10	Y	Yes	1	NA
SW-846 6010D	Boron	7440-42-8	T	ug/L	280				23	23	100	Y	Yes	1	NA
SW-846 6020B	Antimony	7440-36-0	T	ug/L		U			0.57	0.57	2.0	N	Yes	1	NA
	Arsenic	7440-38-2	T	ug/L	3.1	J	RL		0.75	0.75	5.0	Y	Yes	1	NA
	Barium	7440-39-3	T	ug/L	59				2.2	2.2	5.0	Y	Yes	1	NA
	Beryllium	7440-41-7	T	ug/L	0.46	J	RL		0.31	0.31	1.0	Y	Yes	1	NA
	Cadmium	7440-43-9	T	ug/L	0.20	J	RL		0.20	0.20	1.0	Y	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	110000				580	580	1000	Y	Yes	1	NA
	Chromium	7440-47-3	T	ug/L		U			0.98	0.98	2.0	N	Yes	1	NA
	Cobalt	7440-48-4	T	ug/L	30				0.19	0.19	1.0	Y	Yes	1	NA
	Lead	7439-92-1	T	ug/L		U			0.45	0.45	1.0	N	Yes	1	NA
	Lithium	7439-93-2	T	ug/L	6.1	J	RL		1.7	1.7	8.0	Y	Yes	1	NA
	Molybdenum	7439-98-7	T	ug/L	8.5	J	RL		1.1	1.1	10	Y	Yes	1	NA
	Selenium	7782-49-2	T	ug/L		U			0.89	0.89	5.0	N	Yes	1	NA
	Thallium	7440-28-0	T	ug/L	0.35	J	RL		0.20	0.20	1.0	Y	Yes	1	NA
SW-846 7470A	Mercury	7439-97-6	T	ug/L		U			0.13	0.13	0.20	N	Yes	1	NA
SW-846 9056A	Chloride	16887-00-6	N	mg/L	170				0.28	0.28	1.0	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L	0.13				0.024	0.024	0.050	Y	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	280				1.7	1.7	5.0	Y	Yes	5	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	0.198	U	BF	0.101	0.198	0.198	1.00	N	Yes	1	NA
SW-846 9320	Radium-228	15262-20-1	N	pCi/L	0.265	U		0.290	0.474	0.474	1.00	N	Yes	1	NA

Facility: Mount Storm Power Station
SDG: 2401485431

Lab Sample ID	240-148543-7
Sys Sample Code	042921NOW-13
Sample Name	042921NOW-13
Sample Date	4/29/2021 12:35:00 PM
Location	OW-13 / OW-13
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	Radium-226/228	RA226/228	N	pCi/L	1.48	J	S,Y	0.674				Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	650				10	10	10	Y	Yes	1	NA
SW-846 6010D	Boron	7440-42-8	T	ug/L		U			23	23	100	N	Yes	1	NA
SW-846 6020B	Antimony	7440-36-0	T	ug/L		U			0.57	0.57	2.0	N	Yes	1	NA
	Arsenic	7440-38-2	T	ug/L	6.2				0.75	0.75	5.0	Y	Yes	1	NA
	Barium	7440-39-3	T	ug/L	170				2.2	2.2	5.0	Y	Yes	1	NA
	Beryllium	7440-41-7	T	ug/L		U			0.31	0.31	1.0	N	Yes	1	NA
	Cadmium	7440-43-9	T	ug/L		U			0.20	0.20	1.0	N	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	17000				580	580	1000	Y	Yes	1	NA
	Chromium	7440-47-3	T	ug/L	6.7				0.98	0.98	2.0	Y	Yes	1	NA
	Cobalt	7440-48-4	T	ug/L	7.8				0.19	0.19	1.0	Y	Yes	1	NA
	Lead	7439-92-1	T	ug/L	1.1				0.45	0.45	1.0	Y	Yes	1	NA
	Lithium	7439-93-2	T	ug/L	3.9	J	RL		1.7	1.7	8.0	Y	Yes	1	NA
	Molybdenum	7439-98-7	T	ug/L		U			1.1	1.1	10	N	Yes	1	NA
	Selenium	7782-49-2	T	ug/L	1.3	J	RL		0.89	0.89	5.0	Y	Yes	1	NA
	Thallium	7440-28-0	T	ug/L		U			0.20	0.20	1.0	N	Yes	1	NA
SW-846 7470A	Mercury	7439-97-6	T	ug/L		U			0.13	0.13	0.20	N	Yes	1	NA
SW-846 9056A	Chloride	16887-00-6	N	mg/L	24				0.28	0.28	1.0	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L	0.059				0.024	0.024	0.050	Y	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	19				0.35	0.35	1.0	Y	Yes	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	0.365	UJ	Y	0.260	0.366	0.366	1.00	N	Yes	1	NA
SW-846 9320	Radium-228	15262-20-1	N	pCi/L	1.11			0.622	0.922	0.922	1.00	Y	Yes	1	NA

Lab Sample ID	240-148543-8
Sys Sample Code	042921FB
Sample Name	042921FB
Sample Date	4/29/2021 9:10:00 PM
Location	/
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	Radium-226/228	RA226/228	N	pCi/L	0.297	J	S	0.240				Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L		U			10	10	10	N	Yes	1	NA
SW-846 6010D	Boron	7440-42-8	T	ug/L		U			23	23	100	N	Yes	1	NA
SW-846 6020B	Antimony	7440-36-0	T	ug/L		U			0.57	0.57	2.0	N	Yes	1	NA
	Arsenic	7440-38-2	T	ug/L		U			0.75	0.75	5.0	N	Yes	1	NA
	Barium	7440-39-3	T	ug/L		U			2.2	2.2	5.0	N	Yes	1	NA
	Beryllium	7440-41-7	T	ug/L		U			0.31	0.31	1.0	N	Yes	1	NA
	Cadmium	7440-43-9	T	ug/L		U			0.20	0.20	1.0	N	Yes	1	NA
	Calcium	7440-70-2	T	ug/L		U			580	580	1000	N	Yes	1	NA
	Chromium	7440-47-3	T	ug/L		U			0.98	0.98	2.0	N	Yes	1	NA
	Cobalt	7440-48-4	T	ug/L		U			0.19	0.19	1.0	N	Yes	1	NA
	Lead	7439-92-1	T	ug/L		U			0.45	0.45	1.0	N	Yes	1	NA
	Lithium	7439-93-2	T	ug/L		U			1.7	1.7	8.0	N	Yes	1	NA
	Molybdenum	7439-98-7	T	ug/L		U			1.1	1.1	10	N	Yes	1	NA
	Selenium	7782-49-2	T	ug/L		U			0.89	0.89	5.0	N	Yes	1	NA
	Thallium	7440-28-0	T	ug/L		U			0.20	0.20	1.0	N	Yes	1	NA
SW-846 7470A	Mercury	7439-97-6	T	ug/L		U			0.13	0.13	0.20	N	Yes	1	NA
SW-846 9056A	Chloride	16887-00-6	N	mg/L		U			0.28	0.28	1.0	N	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L		U			0.024	0.024	0.050	N	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L		U			0.35	0.35	1.0	N	Yes	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	0.156			0.0974	0.132	0.132	1.00	Y	Yes	1	NA
SW-846 9320	Radium-228	15262-20-1	N	pCi/L	0.141	U		0.219	0.368	0.368	1.00	N	Yes	1	NA

Facility: Mount Storm Power Station
SDG: 2401485431

Lab Sample ID	240-148543-9
Sys Sample Code	042921FD
Sample Name	042921FD
Sample Date	4/29/2021 3:30:00 PM
Location	OW-4A / OW-4A
Sample Type	FD
Matrix	GW
Parent Sample	042921NOW-4A

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	Radium-226/228	RA226/228	N	pCi/L	0.757	J	BF	0.295				Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	100				10	10	10	Y	Yes	1	NA
SW-846 6010D	Boron	7440-42-8	T	ug/L	40	J	RL		23	23	100	Y	Yes	1	NA
SW-846 6020B	Antimony	7440-36-0	T	ug/L		U			0.57	0.57	2.0	N	Yes	1	NA
	Arsenic	7440-38-2	T	ug/L	0.82	J	RL		0.75	0.75	5.0	Y	Yes	1	NA
	Barium	7440-39-3	T	ug/L	70				2.2	2.2	5.0	Y	Yes	1	NA
	Beryllium	7440-41-7	T	ug/L		U			0.31	0.31	1.0	N	Yes	1	NA
	Cadmium	7440-43-9	T	ug/L		U			0.20	0.20	1.0	N	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	22000				580	580	1000	Y	Yes	1	NA
	Chromium	7440-47-3	T	ug/L		U			0.98	0.98	2.0	N	Yes	1	NA
	Cobalt	7440-48-4	T	ug/L	0.62	J	RL		0.19	0.19	1.0	Y	Yes	1	NA
	Lead	7439-92-1	T	ug/L		U			0.45	0.45	1.0	N	Yes	1	NA
	Lithium	7439-93-2	T	ug/L	2.6	J	RL		1.7	1.7	8.0	Y	Yes	1	NA
	Molybdenum	7439-98-7	T	ug/L		U			1.1	1.1	10	N	Yes	1	NA
	Selenium	7782-49-2	T	ug/L		U			0.89	0.89	5.0	N	Yes	1	NA
	Thallium	7440-28-0	T	ug/L		U			0.20	0.20	1.0	N	Yes	1	NA
SW-846 7470A	Mercury	7439-97-6	T	ug/L		U			0.13	0.13	0.20	N	Yes	1	NA
SW-846 9056A	Chloride	16887-00-6	N	mg/L	5.0				0.28	0.28	1.0	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L	0.082				0.024	0.024	0.050	Y	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	46				0.35	0.35	1.0	Y	Yes	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	0.260	U	BF	0.120	0.260	0.260	1.00	N	Yes	1	NA
SW-846 9320	Radium-228	15262-20-1	N	pCi/L	0.497			0.269	0.394	0.394	1.00	Y	Yes	1	NA

APPENDIX B

SECOND SEMI-ANNUAL 2021 ASSESSMENT MONITORING PROGRAM EVENT FIELD DATA SHEETS, LABORATORY CERTIFICATES OF ANALYSIS, CHAIN-OF-CUSTODY FORMS, AND DATA VALIDATION FORMS

Date: 11/4/21

GOLDER

WELL GAUGING LOG

Project Name: MSPS LVWSP

Project No./Task No.: 2013993621

Sampler(s): C. Megee, Z. Hector

Equipment: Water Level Indicator

Well ID	Personnel (initials)	Time	DTW (feet)	DTB (feet)	Well Condition Summary				
					Protective Casing	Well Casing	Label	Lock	Pad Condition
OW-7A	ZH	0959	37.27	—	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
OW-8	CM	1003	45.03	—	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
OW-2A	CM	1320	11.93	—	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
OW-4A	ZH	1334	10.63	—	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
OW-10	CM	1136	10.25	—	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
OW-12	ZH	1253	24.33	—	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
OW-13	ZH	1105	15.59	—	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
OW-2	CM	1455	11.50	—	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
OW-4	ZH	1333	11.80	—	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
OW-6A	CM	1432	6.98	—	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
OW-6B	CM	1428	6.78	—	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
OW-7B	ZH	0952	35.71	—	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
OW-8A	CM	1027	58.16	—	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
OW-9A	CM	1605	12.79	—	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
OW-9B	CM	1600	10.73	—	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
OW-11	CM	1556	16.06	—	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
					☐ OK ☐ Damaged	☐ OK ☐ Damaged	☐ OK ☐ Inadequate	☐ Yes ☐ No	☐ OK ☐ Damaged

Observations/Notes: Reporting Group D LVWSP CCR

Signature: [signature] Date: 11/04/21

QA/QC Signature: [signature] Date: 11/9/21

Date: 11/4/21

GOLDER

WELL GAUGING LOG

Project Name: MSPS LVWSP

Project No./Task No.: 2013993621

Sampler(s): C. Megee, Z. Hector

Equipment: Water Level Indicator

Well ID	Personnel (initials)	Time	DTW (feet)	DTB (feet)	Well Condition Summary				
					Protective Casing	Well Casing	Label	Lock	Pad Condition
OW-14	CM	1558	17.22	—	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
OW-15	CM	1608	7.42	—	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
OW-16	CM	1547	21.41	—	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
OW-17	CM	1551	20.78	—	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
OW-18	CM	1444	21.56	—	☒ OK ☐ Damaged	☒ OK ☐ Damaged	☒ OK ☐ Inadequate	☒ Yes ☐ No	☒ OK ☐ Damaged
OW-19	CM	1543	27.69	—	☒ 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
					☐ 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: [signature] Date: 11/4/21

QA/QC Signature: [signature] Date: 11/9/21

Page 2 of 2

MICROPURGE SAMPLING LOG

Date: 11/4/21
Weather: Calm 20's

Project Name: Mt. Storm PS
Project No./Task No.: 2013993621
Event: 2SA21
Sampler(s): Z. Hecker
Well ID: OW-7A
Field Calibration Completed: @ 0800 on 11/4/21
Well Diameter: 2.0 inches
Initial Depth to Water: 37.27 feet
Depth to Bottom: 51.33 feet
Water Column Thickness: — feet

Equipment Used:
- [x] WL Indicator
- [x] YSI Pro DSS; 17M102883
- [ ] 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
1008	5.40	651	3.07	3.55	6.6	30.5	40.05	~300
1011	5.47	650	10.32	3.13	6.6	21.5	40.45	~~330~~ 360
1014	5.50	633	3.60	3.27	6.5	17.8	40.94	~360
1017	5.52	608	5.47	3.44	6.5	17.5	41.22	~360
1020	5.53	590	5.00	3.43	6.5	16.4	41.26	~360
1023	5.55	581	8.60	3.37	6.6	14.4	41.36	~360
1026	5.57	577	1.99	3.35	6.5	12.4	41.36	~360
1030	—	—	SAMPLE	—	—	—	—	—
1041	5.39	586	5.32	3.86	6.3	9.5	40.92	~360
				2.4				

Purge Cycle (End): 21/9 @ 28 psi
Flow Rate (ml/min End): ~360
Purge volume (gallons) prior to stabilization monitoring (3/8" I.D. Tube: Vol=Depth to Pump x 0.006 gal/ft): ~0.30
Total Purge Volume (Gallons): ~3
Purge Water Management: oil/water separator
Purge Observations (color, odor, turbidity, sheen): Clear grab sample
Purge time: 0959

Sample Time: 1030
Field Filtered (0.45um): ☐ Yes ☑ No

Sample Parameters/Analyte(s):
- ☐ Petro (DRO)
- ☐ CCR Appendix III
- ☐ CCR Appendix IV
- ☐ Closed 5-year NPDES (Diss [Ba, Bo, Fe, Mn], SO4, TDS, TSS)
- ☐ Phase A&B NPDES (Diss [Al, Sb, As, Ba, Be, Bo, Cd, Cu, Fe, Pb, Mn, Hg, Ni, Se, Tl],Cl, Cr Tot, NO2+NO3 N, SO4, NH3-N Tot, TDS, TSS)
- ☐ Variance (Diss [Be, Cd, Cr, Pb, Ni])
- ☒ LVWSP IV Detects (As, Ba, Be, Cd, Cr, Co, Pb, Mo, Tl, Rad 226-228)
- ☐ Phase A IV Detects (As, Ba, Be, Cd, Cr, Co, Pb, Li, Se, Rad 226-228)
- Phase B IV Detects (As, Ba, Be, Cd, Cr, Co, Pb, Li, Mo, Se, Tl, Rad 226-228)

Other Observations / Equipment Operation Problems: DTP: 45.20
Sample ID: 110421NOW-7

Sampler Signature: [signature] Date: 11/4/21
QA/QC Signature: [signature] Date: 11/08/21

MICROPURGE SAMPLING LOG

GOLDER

Date: 11/04/21
Weather: Sunny 40's

Project Name: Mt. Storm PS
Project No./Task No.: 20139936.21
Event: 2SA21 GW LVWSP
Sampler(s): C. Mizer
Well ID: OW-8
Field Calibration Completed: 11/04/21 @ 0800
Well Diameter: 2.0 inches
Initial Depth to Water: 45.03 feet
Depth to Bottom: — feet
Water Column Thickness: — feet

Equipment Used:
- [X] WL Indicator
- [X] YSI 2(01)55 15J105600
- [ ] 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
1010	6.34	2113	74.4	3.00	11.3	-35.7	46.31	~300
1015	6.34	2084	39.2	1.79	11.2	-51.9	46.40	~300
1020	6.37	2033	40.2	1.67	11.3	-53.7	46.62	~300
1025	6.37	2034	23.0	1.55	11.3	-51.8	46.59	~250
1030	6.36	2047	14.0	1.56	11.1	-49.9	46.70	~250
1035	6.36	2060	31.0	1.56	11.3	-49.3	46.56	~250
1040	6.36	2064	11.6	1.52	11.3	-48.7	46.50	~250
1045	6.36	2065	8.2	1.46	11.3	-48.0	46.62	~250
1050	—	—	—	SAMPLED	—	—	—	—
1106	6.36	2085	2.1	1.47	11.3	-44.9	46.60	~250

Purge Cycle (End): 53/7 Secs. @ 35 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): (53.85)(0.006) = ~0.32
Total Purge Volume (Gallons): ~35
Purge Water Management: O.W.S. Containment
Purge Observations (color, odor, turbidity, sheen): Clear grab Sample
Purge time: 1003
Sample Time: 1050
Field Filtered (0.45um): [ ] Yes [X] No

Sample Parameters/Analyte(s):
- [ ] Petro (DRO)
- [ ] CCR Appendix III
- [ ] CCR Appendix IV
- [ ] Closed 5-year NPDES (Diss [Ba, Bo, Fe, Mn], SO4, TDS, TSS)
- [ ] Phase A&B NPDES (Diss [Al, Sb, As, Ba, Be, Bo, Cd, Cu, Fe, Pb, Mn, Hg, Ni, Se, Tl],Cl, Cr Tot, NO2+NO3 N, SO4, NH3-N Tot, TDS, TSS)
- [ ] Variance (Diss [Be, Cd, Cr, Pb, Ni])
- [X] LVWSP IV Detects (As, Ba, Be, Cd, Cr, Co, Pb, Mo, Tl, Rad 226-228)
- [ ] Phase A IV Detects (As, Ba, Be, Cd, Cr, Co, Pb, Li, Se, Rad 226-228)
- [ ] Phase B IV Detects (As, Ba, Be, Cd, Cr, Co, Pb, Li, Mo, Se, Tl, Rad 226-228)

Other Observations / Equipment Operation Problems:

Sampler Signature: [signature] Date: 11/04/21
QA/QC Signature: [signature] Date: 11/9/21

Sample ID: 110421NOW8

GOLDER

MICROPURGE SAMPLING LOG

Date: 11/04/21

Weather: Cloudy 30's

Project Name: Mt. Storm PS

Project No./Task No.: 20139936.21

Event: 2SA216W LVWSP

Sampler(s): C. Megee

Well ID: OW-2A

Field Calibration Completed: 11/04/21 @ 0800

Well Diameter: 2.0 inches

Initial Depth to Water: 11.93 feet

Depth to Bottom: — feet

Water Column Thickness: — feet

Equipment Used:
- [X] WL Indicator
- [X] YSI Pro DSS 15J10302
- [ ] 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
1352	5.34	553	352.0	1.87	12.5	105.2	12.00	~300
1357	5.29	546	283.4	1.44	12.7	110.9	12.13	~300
1402	5.28	545	282.6	1.35	12.8	113.6	12.02	~300
1407	5.32	545	231.2	1.33	12.8	110.4	12.00	~300
1412	5.40	550	242.0	1.30	12.8	99.6	12.20	~~~300~~ ~225
1417	5.46	557	231.7	1.50	12.8	82.6	~~12~~ 11.97	~200
1422	5.50	559	221.3	1.32	12.9	79.1	11.90	~200
1427	5.52	561	193.7	1.30	12.9	75.0	11.93	~200
1432	5.55	562	159.7	1.27	13.0	70.7	12.00	~200
1437	5.52	561	128.8	1.26	12.9	72.0	12.06	~200
1442	5.55	563	102.1	1.26	12.9	68.4	11.98	~200
1447	5.60	568	95.9	1.26	12.9	61.5	11.90	~200
1452	5.64	571	74.0	1.26	12.9	55.2	11.97	~200
1457	5.68	577	63.8	1.26	12.9	47.5	11.95	~200
1502	5.71	579	51.3	1.25	12.9	42.0	12.00	~200
1507	5.72	580	50.2	1.23	12.9	39.4	12.00	~200
1533	5.78	587	27.9	1.34	12.9	35.1	12.05	~200

1510 SAMPLED

Purge Cycle (End): 55/5 @ 20 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) (27.80)(0.006) = ~0.17

Total Purge Volume (Gallons): ~5.0 Purge Water Management: O.W.S. Containment

Purge Observations (color, odor, turbidity, sheen): Tan grab Sample

Purge time: 1320

Sample Time: 1510

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

Sample Parameters/Analyte(s): [ ] Petro (DRO) [ ] CCR Appendix III [ ] CCR Appendix IV

- [ ] Closed 5-year NPDES (Diss [Ba, Bo, Fe, Mn], SO4, TDS, TSS)
- [ ] Phase A&B NPDES (Diss [Al, Sb, As, Ba, Be, Bo, Cd, Cu, Fe, Pb, Mn, Hg, Ni, Se, Tl],Cl, Cr Tot, NO2+NO3 N, SO4, NH3-N Tot, TDS, TSS)
- [ ] Variance (Diss [Be, Cd, Cr, Pb, Ni])
- [X] LVWSP IV Detects (As, Ba, Be, Cd, Cr, Co, Pb, Mo, Tl, Rad 226-228)
- [ ] Phase A IV Detects (As, Ba, [illegible] Cd, Cr, Co, Pb, Li, Se, Rad 226-228)
- Phase B IV Detects (As, Ba, Be, Cd, Cr, Co, Pb, Li, Mo, Se, Tl, Rad 226-228)

Other Observations / Equipment Operation Problems: DTB = 32.62 Sample

Pump Stopped Purging -- Pulled Pump 1330

1350 resume purging

Sampler Signature: [signature] Date: 11/04/21

QA/QC Signature: [signature] Date: 11/9/21

Sample ID: 110421NOW2A

MICROPURGE SAMPLING LOG

Date: 11/4/21
Weather: Calm 30's

GOLDER

Project Name: Mt. Storm PS
Project No./Task No.: 20139936 21
Event: 2SA21 GW
Sampler(s): Z. Hector
Well ID: OW-4A
Field Calibration Completed: @0800 on 11/4/21
Well Diameter: 2.0 inches
Initial Depth to Water: 10.63 feet
Depth to Bottom: ~~Pro DSS: 17MW0286~~ 24 32.97 feet
Water Column Thickness: ——— feet

Equipment Used:
- [x] WL Indicator
- [ ] Turbidity Meter
- [ ] Air Tank
- [x] Dedicated Bladder Pump
- [x] YSI ~~Pro DSS: 17MW0286~~
- [ ] 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
1346	6.15	328.0	10.41	3.24	14.6	-23.7	10.66	~280
1351	6.31	317.2	7.61	3.17	14.6	-48.6	10.63	~280
1356	6.35	311.9	12.50	3.01	14.7	-56.4	10.63	~280
1401	6.38	308.2	9.04	3.63	14.4	-58.0	10.63	~280
1405 ~~1406~~			SAMPLE					~280
1428	6.34	300.2	15.24	3.77	13.8	-53.7	10.64	~280

Purge Cycle (End): 21/9 @ 20 psi
Flow Rate (ml/min End): ~280
Purge volume (gallons) prior to stabilization monitoring (3/8" I.D. Tube: Vol=Depth to Pump x 0.006 gal/ft): ~0.16
Total Purge Volume (Gallons): ~2.5
Purge Water Management: On site ops
Purge Observations (color, odor, turbidity, sheen): ~~Clear grab sample~~ 21 Light tan grab sample
Purge time: 1336
Sample Time: 1405
Field Filtered (0.45um): [ ] Yes [x] ~~No~~

Sample Parameters/Analyte(s):
- [ ] Petro (DRO)
- [ ] CCR Appendix III
- [ ] CCR Appendix IV
- [ ] Closed 5-year NPDES (Diss [Ba, Bo, Fe, Mn], SO4, TDS, TSS)
- [ ] Phase A&B NPDES (Diss [Al, Sb, As, Ba, Be, Bo, Cd, Cu, Fe, Pb, Mn, Hg, Ni, Se, Tl],Cl, Cr Tot, NO2+NO3 N, SO4, NH3-N Tot, TDS, TSS)
- [ ] Variance (Diss [Be, Cd, Cr, Pb, Ni])
- [x] LVWSP IV Detects (As, Ba, Be, Cd, Cr, Co, Pb, Mo, Tl, Rad 226-228)
- [ ] Phase A IV Detects (As, Ba, Be, Cd, Cr, Co, Pb, Li, Se, Rad 226-228)
- [ ] Phase B IV Detects (As, Ba, Be, Cd, Cr, Co, Pb, Li, Mo, Se, Tl, Rad 226-228)

Other Observations / Equipment Operation Problems: DTP: 28.25
Sample ID: 110421NOW-4A

Sampler Signature: [signature] Date: 11/4/21
QA/QC Signature: [signature] Date: 11/08/21

Page 1 of 1

12150Z

MICROPURGE SAMPLING LOG

GOLDER

Date: 11/04/21
Weather: ~~Sc~~ cloudy 30's

Project Name: Mt. Storm PS
Project No./Task No.: 20139936.21
Event: 2SA2021 GN LVWSP
Sampler(s): C. Meade
Well ID: OW-10
Field Calibration Completed: 11/04/21 @ 0800
Well Diameter: 20 inches
Initial Depth to Water: 10.25 feet
Depth to Bottom: — feet
Water Column Thickness: — feet

Equipment Used:
- [x] WL Indicator
- [x] YSI PRO DSS 15J103602
- [ ] 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
1144	6.59	333.8	29.7	1.67	14.8	-94.0	10.40	~360
1147	6.58	329.0	15.3	1.54	14.9	-94.8	10.34	~360
1150	6.56	330.1	15.0	~~5.71~~ 1.51	14.9	-94.1	10.36	~360
1153	6.54	332.8	18.4	1.46	14.9	-92.6	10.30	~360
1156	6.53	336.3	13.4	1.46	14.9	-91.5	10.40	~360
1159	6.51	337.8	8.9	1.48	15.0	-90.2	10.32	~360
1205	—	—	—	SAMPLED	—	—	—	—
1239	6.50	339.8	1.9	1.46	14.7	-79.6	10.32	~360

Purge Cycle (End): 15/5 Secs. @ 18 psi
Flow Rate (ml/min End): ~360
Purge volume (gallons) prior to stabilization monitoring (3/8" I.D. Tube: Vol=Depth to Pump x 0.006 gal/ft) (28.25)(0.006) = ~0.17
Total Purge Volume (Gallons): ~3.0
Purge Water Management: O.W.S. Containment
Purge Observations (color, odor, turbidity, sheen): Clear grab Sample
Purge time: 1136
Sample Time: 1205
Field Filtered (0.45um): [ ] Yes [x] No

Sample Parameters/Analyte(s):
- [ ] Petro (DRO)
- [ ] CCR Appendix III
- [ ] CCR Appendix IV
- [ ] Closed 5-year NPDES (Diss [Ba, Bo, Fe, Mn], SO4, TDS, TSS)
- [ ] Phase A&B NPDES (Diss [Al, Sb, As, Ba, Be, Bo, Cd, Cu, Fe, Pb, Mn, Hg, Ni, Se, Tl],Cl, Cr Tot, NO2+NO3 N, SO4, NH3-N Tot, TDS, TSS)
- [ ] Variance (Diss [Be, Cd, Cr, Pb, Ni])
- [x] LVWSP IV Detects (As, Ba, Be, Cd, Cr, Co, Pb, Mo, Tl, Rad 226-228)
- [ ] Phase A IV Detects (As, Ba, [ ] Cd, Cr, Co, Pb, Li, Se, Rad 226-228)
- Phase B IV Detects (As, Ba, Be, Cd, Cr, Co, Pb, Li, Mo, Se, Tl, Rad 226-228)

Other Observations / Equipment Operation Problems: * MS/MSD Sampled @ OW-10

Sampler Signature: [signature] Date: 11/04/21
QA/QC Signature: [signature] Date: 11/9/21

Page 1 of 1

Sample ID: 110421NOW-10

GOLDER

MICROPURGE SAMPLING LOG

Date: 11/4/21

Weather: Calm 30's

Project Name: Mt. Storm PS

Project No./Task No.: 20139936.21

Event: 2SA21 GW 4QZ1

Sampler(s): Z. Mecham

Well ID: OW-12

Field Calibration Completed: @0800 on 11/4/21

Well Diameter: 2.0 inches

Initial Depth to Water: 24.36 feet

Depth to Bottom: 31.00 feet

Water Column Thickness: — feet

Equipment Used:
- [x] WL Indicator
- [x] YSI ProDSS: 17H101381
- [ ] In-Situ —
- [ ] Turbidity Meter
- [ ] Peristaltic Pump
- [ ] MP-10 Controller Box
- [ ] Air Tank
- [ ] Compressor
- [x] MP-15 Controller Box
- [x] Dedicated Bladder Pump
- [x] 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
1504	5.56	833	4.75	2.46	11.1	18.3	24.47	~230
1509	5.55	848	4.13	2.36	11.1	19.2	24.40	~230
1514	5.52	869	5.40	2.22	10.9	21.7	24.47	~230
1519	5.50	885	8.90	2.22	10.8	24.0	24.51	~230
1524	5.49	904	2.68	2.09	10.9	25.5	24.49	~230
1529	5.50	918	2.30	2.08	10.7	26.7	24.53	~230
1534	5.46	930	2.31	2.09	10.9	31.2	24.40	~230
1540	—	—	SAMPLE	—	—	—	—	—
1603	5.38	890	2.67	2.75	8.2	36.7	24.44	~230

Purge Cycle (End): 25/5 @ 31 psi Flow Rate (ml/min End): ~230

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): ~2.5 Purge Water Management: On site OW-3

Purge Observations (color, odor, turbidity, sheen): Clear grab Sample

Purge time ~~1356~~ 1456

Sample Time: 1540

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

Sample Parameters/Analyte(s):
- [ ] Petro (DRO)
- [ ] CCR Appendix III
- [ ] CCR Appendix IV
- [ ] Closed 5-year NPDES (Diss [Ba, Bo, Fe, Mn], SO4, TDS, TSS)
- [ ] Phase A&B NPDES (Diss [Al, Sb, As, Ba, Be, Bo, Cd, Cu, Fe, Pb, Mn, Hg, Ni, Se, Tl],Cl, Cr Tot, NO2+NO3 N, SO4, NH3-N Tot, TDS, TSS)
- [ ] Variance (Diss [Be, Cd, Cr, Pb, Ni])
- [x] LVWSP IV Detects (As, Ba, Be, Cd, Cr, Co, Pb, Mo, Tl, Rad 226-228)
- [ ] Phase A IV Detects (As, Ba, Be, Cd, Cr, Co, Pb, Li, Se, Rad 226-228)
- [ ] Phase B IV Detects (As, Ba, Be, Cd, Cr, Co, Pb, Li, Mo, Se, Tl, Rad 226-228)

Other Observations / Equipment Operation Problems:

Sample ID: 110421NOW-12

Sampler Signature: [signature] Date: 11/4/21

QA/QC Signature: [signature] Date: 11/08/21

MICROPURGE SAMPLING LOG

Date: 11/4/21
Weather: Calm, 30's

Project Name: Mt. Storm PS
Project No./Task No.: 2013993621
Event: 4Q21 ~~1Q22~~ 2SA21 CW
Sampler(s): Z. Hecker
Well ID: OW-13
Field Calibration Completed: 0800 on 11/4/21
Well Diameter: 2.0 inches
Initial Depth to Water: 15.59 feet
Depth to Bottom: 27.40 feet
Water Column Thickness: — feet

Equipment Used:
- [x] WL Indicator
- [x] YSI ~~Pro DSS~~ 17A102881
- [ ] In-Situ —
- [ ] Turbidity Meter
- [ ] Peristaltic Pump
- [ ] MP-10 Controller Box
- [ ] Air Tank
- [ ] Compressor
- [x] MP-15 Controller Box
- [ ] Dedicated Bladder Pump
- [x] 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
1115	5.72	931	100.81	2.46	9.9	-73.8	16.18	~240
1120	5.90	918	97.79	2.26	9.8	-82.3	16.39	~240
1125	5.92	911	68.88	2.24	9.7	-83.4	16.49	~240
1130	5.92	903	51.05	2.18	9.7	-84.9	16.44	~240
1135	5.90	892	46.89	2.16	9.7	-84.4	16.45	~240
1140	5.88	875	29.35	2.27	9.6	-73.1	16.45	~240
1145	5.90	858	35.42	2.17	9.6	-77.3	16.45	~240
1150	5.89	838	28.99	2.16	9.5	-78.4	16.62	~240
1155	5.90	815	25.89	2.16	9.4	-79.1	16.55	~240
1200	5.91	802	24.63	2.15	9.3	-79.8	16.65	~240
1205	—	—	SAMPLE	—	—	—	—	—
1230	5.79	751	23.53	2.27	9.4	-68.1	16.60	~240

Purge Cycle (End): 24/6 @ 22 psi
Flow Rate (ml/min End): ~240
Purge volume (gallons) prior to stabilization monitoring (3/8" I.D. Tube: Vol=Depth to Pump x 0.006 gal/ft): ~0.2
Total Purge Volume (Gallons): ~2.5
Purge Water Management: On site OWS
Purge Observations (color, odor, turbidity, sheen): ~~Sheen in purge water bucket~~ cm Clear grab Sample
Purge time: 1108
Sample Time: 1205
Field Filtered (0.45um): [ ] Yes [x] No

Sample Parameters/Analyte(s):
- [ ] Petro (DRO)
- [ ] CCR Appendix III
- [ ] CCR Appendix IV
- [ ] Closed 5-year NPDES (Diss [Ba, Bo, Fe, Mn], SO4, TDS, TSS)
- [ ] Phase A&B NPDES (Diss [Al, Sb, As, Ba, Be, Bo, Cd, Cu, Fe, Pb, Mn, Hg, Ni, Se, Tl],Cl, Cr Tot, NO2+NO3 N, SO4, NH3-N Tot, TDS, TSS)
- [ ] Variance (Diss [Be, Cd, Cr, Pb, Ni])
- [x] LVWSP IV Detects (As, Ba, Be, Cd, Cr, Co, Pb, Mo, Tl, Rad 226-228)
- [ ] Phase A IV Detects (As, Ba, Be, Cd, Cr, Co, Pb, Li, Se, Rad 226-228)
- [ ] Phase B IV Detects (As, Ba, Be, Cd, Cr, Co, Pb, Li, Mo, Se, Tl, Rad 226-228)

Other Observations / Equipment Operation Problems: DTP: 22.40
Sample ID: 11042INOW-13

Sampler Signature: [signature] Date: 11/4/21
QA/QC Signature: [signature] Date: 11/08/21

GOLDER

MICROPURGE SAMPLING LOG

Date: 11/04/21

Weather: Cloudy 30's

Project Name: Mt. Storm PS

Project No./Task No.: 2013993621

Event: 2SA2021 CW LVWSP

Sampler(s): C. Mayer

Well ID: Allen 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
- ☐ YSI —
- ☐ In-Situ —
- ☐ Turbidity Meter
- ☐ Peristaltic Pump
- ☐ MP-10 Controller Box
- ☐ Air Tank
- ☐ Compressor
- ☐ MP-15 Controller Box
- ☐ 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
1410				SAMPLED				

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 taken near OW-2A w/ Lab provided D.I Water

Sample Time: 1410 Field Filtered (0.45um): ☐ Yes ☒ No

Sample Parameters/Analyte(s): ☐ Petro (DRO) ☐ CCR Appendix III ☐ CCR Appendix IV

☐ Closed 5-year NPDES (Diss [Ba, Bo, Fe, Mn], SO4, TDS, TSS)

☐ Phase A&B NPDES (Diss [Al, Sb, As, Ba, Be, Bo, Cd, Cu, Fe, Pb, Mn, Hg, Ni, Se, Tl],Cl, Cr Tot, NO2+NO3 N, SO4, NH3-N Tot, TDS, TSS)

☐ Variance (Diss [Be, Cd, Cr, Pb, Ni])

☒ LVWSP IV Detects (As, Ba, Be, Cd, Cr, Co, Pb, Mo, Tl, Rad 226-228)

☐ Phase A IV Detects (As, Ba, Be, Cd, Cr, Co, Pb, Li, Se, Rad 226-228)

☐ Phase B IV Detects (As, Ba, Be, Cd, Cr, Co, Pb, Li, Mo, Se, Tl, Rad 226-228)

Other Observations / Equipment Operation Problems:

Sampler Signature: [signature] Date: 11/4/21

QA/QC Signature: [signature] Date: 11/9/21

GOLDER

MICROPURGE SAMPLING LOG

Date: 11/4/21

Weather: Calm, 30's

Project Name: MT Storm PS

Project No./Task No.: 20139363621

Event: 2Q21 GW 4Q21

Sampler(s): Z. Hector

Well ID: 110421FDDuplicate

Field Calibration Completed: —

Well Diameter: — inches

Initial Depth to Water: — feet

Depth to Bottom: — feet

Water Column Thickness: — feet

Equipment Used:
- ☐ WL Indicator
- ☐ YSI —
- ☐ In-Situ —
- ☐ Turbidity Meter
- ☐ Peristaltic Pump
- ☐ MP-10 Controller Box
- ☐ Air Tank
- ☐ Compressor
- ☑ MP-15 Controller Box
- ☐ 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
1420	—	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): Slight tan grab sample taken from OW-4A

Sample Time: 1420 Field Filtered (0.45um): ☐ Yes ☑ No

Sample Parameters/Analyte(s): ☐ Petro (DRO) ☐ CCR Appendix III ☐ CCR Appendix IV

☐ Closed 5-year NPDES (Diss [Ba, Bo, Fe, Mn], SO4, TDS, TSS) ☐ Phase A&B NPDES (Diss [Al, Sb, As, Ba, Be, Bo, Cd, Cu, Fe, Pb, Mn, Hg, Ni, Se, Tl],Cl, Cr Tot, NO2+NO3 N, SO4, NH3-N Tot, TDS, TSS)

☐ Variance (Diss [Be, Cd, Cr, Pb, Ni]) ☒ LVWSP IV Detects (As, Ba, Be, Cd, Cr, Co, Pb, Mo, Tl, Rad 226-228) ☐ Phase A IV Detects (As, Ba, Be, Cd, Cr, Co, Pb, Li, Se, Rad 226-228) ☐ Phase B IV Detects (As, Ba, Be, Cd, Cr, Co, Pb, Li, Mo, Se, Tl, Rad 226-228)

Other Observations / Equipment Operation Problems:

Sample ID ~~110421MW4~~ 110421FDDuplicate

Sampler Signature: [signature] Date: 11/4/21

QA/QC Signature: [signature] Date: 11/08/21

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

Laboratory Job ID: 240-159571-1
Laboratory SDG: Low Volume Waste Settling Ponds (LVWSP) CCR
Client Project/Site: Mount Storm Power Station

For:
Dominion Energy Services, Inc.
5000 Dominion Blvd
Glen Allen, Virginia 23060

Attn: Kelly Hicks

Roxanne Cisneros

Authorized for release by:
12/15/2021 6:30:06 PM

Roxanne Cisneros, Senior Project Manager
(615)301-5761
roxanne.cisneros@Eurofinset.com

Table of Contents

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Rad

Qualifier	Qualifier Description
G	The Sample MDC is greater than the requested RL.
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 240-159571-1

Laboratory: Eurofins TestAmerica, Canton

Narrative

Job Narrative
240-159571-1

Comments
No additional comments.

Receipt
The samples were received on 11/6/2021 10:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 5 coolers at receipt time were 0.4º C, 1.3º C, 2.5º C, 3.4º C and 4.2º C.

RAD
Methods 9315: Radium 226 batch 536245: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. 110421NOW-7A (240-159571-1), 110421NOW-8 (240-159571-2), 110421NOW-2A (240-159571-3), 110421NOW-4A (240-159571-4), 110421NOW-10 (240-159571-5), 110421NOW-10 (240-159571-5[MS]), 110421NOW-10 (240-159571-5[MSD]), 110421NOW-12 (240-159571-6), 110421NOW-13 (240-159571-7), 110421FBFieldBlank (240-159571-8), 110421FDDuplicate (240-159571-9), (LCS 160-536245/1-A), (MB 160-536245/25-A)

Method 9320: Radium 228 batch 536394: The detection goal was not met for the following sample(s). Samples were prepped at a reduced volume due to the presence of matrix interferences: 110421NOW-2A (240-159571-3) and 110421NOW-13 (240-159571-7). Analytical results are reported with the detection limit achieved.

Methods 9320: Radium 228 batch 536394: Any minimum detectable concentration (MDC), critical value (DLC), or Safe Drinking Water Act detection limit (SDWA DL) is sample-specific unless otherwise stated elsewhere in this narrative. Radiochemistry sample results are reported with the count date/time applied as the Activity Reference Date. 110421NOW-7A (240-159571-1), 110421NOW-8 (240-159571-2), 110421NOW-2A (240-159571-3), 110421NOW-4A (240-159571-4), 110421NOW-10 (240-159571-5), 110421NOW-10 (240-159571-5[MS]), 110421NOW-10 (240-159571-5[MSD]), 110421NOW-12 (240-159571-6), 110421NOW-13 (240-159571-7), 110421FBFieldBlank (240-159571-8), 110421FDDuplicate (240-159571-9), (LCS 160-536394/1-A), (MB 160-536394/25-A),

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Method Summary

Client: Dominion Energy Services, Inc. Job ID: 240-159571-1
Project/Site: Mount Storm Power Station SDG: Low Volume Waste Settling Ponds (LVWSP) CCR

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	TAL CAN
6020B	Metals (ICP/MS)	SW846	TAL CAN
9056A	Anions, Ion Chromatography	SW846	TAL CAN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PIT
9315	Radium-226 (GFPC)	SW846	TAL SL
9320	Radium-228 (GFPC)	SW846	TAL SL
Ra226_Ra228 Pos	Combined Radium-226 and Radium-228	TAL-STL	TAL SL
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL CAN
PrecSep_0	Preparation, Precipitate Separation	None	TAL SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	TAL SL

Protocol References:

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL-STL = TestAmerica Laboratories, St. Louis, Facility Standard Operating Procedure.

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Dominion Energy Services, Inc.
Project/Site: Mount Storm Power Station

Job ID: 240-159571-1
SDG: Low Volume Waste Settling Ponds (LVWSP) CCR

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-159571-1	110421NOW-7A	Water	11/04/21 10:30	11/06/21 10:30
240-159571-2	110421NOW-8	Water	11/04/21 10:50	11/06/21 10:30
240-159571-3	110421NOW-2A	Water	11/04/21 15:10	11/06/21 10:30
240-159571-4	110421NOW-4A	Water	11/04/21 14:05	11/06/21 10:30
240-159571-5	110421NOW-10	Water	11/04/21 12:05	11/06/21 10:30
240-159571-6	110421NOW-12	Water	11/04/21 15:40	11/06/21 10:30
240-159571-7	110421NOW-13	Water	11/04/21 12:05	11/06/21 10:30
240-159571-8	110421FBFieldBlank	Water	11/04/21 14:10	11/06/21 10:30
240-159571-9	110421FDDuplicate	Water	11/04/21 14:20	11/06/21 10:30

Detection Summary

Client: Dominion Energy Services, Inc.
Project/Site: Mount Storm Power Station

Job ID: 240-159571-1
SDG: Low Volume Waste Settling Ponds (LVWSP) CCR

Client Sample ID: 110421NOW-7A — Lab Sample ID: 240-159571-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	280		5.0	2.2	ug/L	1		6020B	Total Recoverable
Calcium	43000		1000	580	ug/L	1		6020B	Total Recoverable
Cobalt	3.6		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	14		8.0	1.7	ug/L	1		6020B	Total Recoverable
Chloride	95		1.0	0.28	mg/L	1		9056A	Total/NA
Fluoride	0.11		0.050	0.024	mg/L	1		9056A	Total/NA
Sulfate	9.6		1.0	0.35	mg/L	1		9056A	Total/NA
Total Dissolved Solids	270		10	10	mg/L	1		SM 2540C	Total/NA

Client Sample ID: 110421NOW-8 — Lab Sample ID: 240-159571-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	100		100	57	ug/L	1		6010D	Total Recoverable
Barium	11		5.0	2.2	ug/L	1		6020B	Total Recoverable
Calcium	310000		1000	580	ug/L	1		6020B	Total Recoverable
Cobalt	25		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	8.7		8.0	1.7	ug/L	1		6020B	Total Recoverable
Chloride	190		1.0	0.28	mg/L	1		9056A	Total/NA
Fluoride	0.050		0.050	0.024	mg/L	1		9056A	Total/NA
Sulfate	690		5.0	1.7	mg/L	5		9056A	Total/NA
Total Dissolved Solids	1500		10	10	mg/L	1		SM 2540C	Total/NA

Client Sample ID: 110421NOW-2A — Lab Sample ID: 240-159571-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	99	J	100	57	ug/L	1		6010D	Total Recoverable
Arsenic	1.7	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	200		5.0	2.2	ug/L	1		6020B	Total Recoverable
Cadmium	3.9		1.0	0.20	ug/L	1		6020B	Total Recoverable
Calcium	59000		1000	580	ug/L	1		6020B	Total Recoverable
Cobalt	180		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	0.94	J	1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	2.6	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Molybdenum	1.3	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Chloride	49		1.0	0.28	mg/L	1		9056A	Total/NA
Fluoride	0.036	J	0.050	0.024	mg/L	1		9056A	Total/NA
Sulfate	80		1.0	0.35	mg/L	1		9056A	Total/NA
Total Dissolved Solids	350		10	10	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Dominion Energy Services, Inc.
Project/Site: Mount Storm Power Station

Job ID: 240-159571-1
SDG: Low Volume Waste Settling Ponds (LVWSP) CCR

Client Sample ID: 110421NOW-4A — Lab Sample ID: 240-159571-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	85	J	100	57	ug/L	1		6010D	Total Recoverable
Arsenic	1.5	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	79		5.0	2.2	ug/L	1		6020B	Total Recoverable
Calcium	24000		1000	580	ug/L	1		6020B	Total Recoverable
Cobalt	0.34	J	1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	1.9	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Molybdenum	1.4	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Chloride	4.8		1.0	0.28	mg/L	1		9056A	Total/NA
Fluoride	0.074		0.050	0.024	mg/L	1		9056A	Total/NA
Sulfate	42		1.0	0.35	mg/L	1		9056A	Total/NA
Total Dissolved Solids	110		10	10	mg/L	1		SM 2540C	Total/NA

Client Sample ID: 110421NOW-10 — Lab Sample ID: 240-159571-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	97	J	100	57	ug/L	1		6010D	Total Recoverable
Arsenic	1.0	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	280		5.0	2.2	ug/L	1		6020B	Total Recoverable
Calcium	39000		1000	580	ug/L	1		6020B	Total Recoverable
Cobalt	0.23	J	1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	8.8		8.0	1.7	ug/L	1		6020B	Total Recoverable
Thallium	0.62	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Chloride	6.7		1.0	0.28	mg/L	1		9056A	Total/NA
Fluoride	0.21		0.050	0.024	mg/L	1		9056A	Total/NA
Total Dissolved Solids	200		10	10	mg/L	1		SM 2540C	Total/NA

Client Sample ID: 110421NOW-12 — Lab Sample ID: 240-159571-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	260		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	2.4	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	59		5.0	2.2	ug/L	1		6020B	Total Recoverable
Calcium	88000		1000	580	ug/L	1		6020B	Total Recoverable
Cobalt	49		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	2.4	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Molybdenum	3.3	J	5.0	1.1	ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: 110421NOW-12 (Continued) Lab Sample ID: 240-159571-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	110		1.0	0.28	mg/L	1		9056A	Total/NA
Fluoride	0.056		0.050	0.024	mg/L	1		9056A	Total/NA
Sulfate	240		5.0	1.7	mg/L	5		9056A	Total/NA
Total Dissolved Solids	610		10	10	mg/L	1		SM 2540C	Total/NA

Client Sample ID: 110421NOW-13 Lab Sample ID: 240-159571-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	65	J	100	57	ug/L	1		6010D	Total Recoverable
Arsenic	8.0		5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	170		5.0	2.2	ug/L	1		6020B	Total Recoverable
Calcium	20000		1000	580	ug/L	1		6020B	Total Recoverable
Chromium	5.5		5.0	2.5	ug/L	1		6020B	Total Recoverable
Cobalt	4.1		1.0	0.19	ug/L	1		6020B	Total Recoverable
Lead	0.56	J	1.0	0.45	ug/L	1		6020B	Total Recoverable
Selenium	1.2	J	5.0	0.89	ug/L	1		6020B	Total Recoverable
Chloride	23		1.0	0.28	mg/L	1		9056A	Total/NA
Fluoride	0.044	J	0.050	0.024	mg/L	1		9056A	Total/NA
Total Dissolved Solids	380		10	10	mg/L	1		SM 2540C	Total/NA

Client Sample ID: 110421FBFieldBlank Lab Sample ID: 240-159571-8

No Detections.

Client Sample ID: 110421FDDuplicate Lab Sample ID: 240-159571-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	82	J	100	57	ug/L	1		6010D	Total Recoverable
Arsenic	1.6	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	74		5.0	2.2	ug/L	1		6020B	Total Recoverable
Calcium	24000		1000	580	ug/L	1		6020B	Total Recoverable
Cobalt	0.34	J	1.0	0.19	ug/L	1		6020B	Total Recoverable
Lithium	2.3	J	8.0	1.7	ug/L	1		6020B	Total Recoverable
Molybdenum	1.5	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Chloride	5.1		1.0	0.28	mg/L	1		9056A	Total/NA
Fluoride	0.10		0.050	0.024	mg/L	1		9056A	Total/NA
Sulfate	46		1.0	0.35	mg/L	1		9056A	Total/NA
Total Dissolved Solids	110		10	10	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 110421NOW-7A
Date Collected: 11/04/21 10:30
Date Received: 11/06/21 10:30

Lab Sample ID: 240-159571-1
Matrix: Water

Method: 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<57		100	57	ug/L		11/09/21 14:00	11/10/21 21:16	1

Method: 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.75		5.0	0.75	ug/L		11/09/21 14:00	11/10/21 22:23	1
Barium	**280**		5.0	2.2	ug/L		11/09/21 14:00	11/10/21 22:23	1
Beryllium	<0.62		1.0	0.62	ug/L		11/09/21 14:00	11/10/21 22:23	1
Cadmium	<0.20		1.0	0.20	ug/L		11/09/21 14:00	11/10/21 22:23	1
Calcium	**43000**		1000	580	ug/L		11/09/21 14:00	11/10/21 22:23	1
Chromium	<2.5		5.0	2.5	ug/L		11/09/21 14:00	11/10/21 22:23	1
Cobalt	**3.6**		1.0	0.19	ug/L		11/09/21 14:00	11/10/21 22:23	1
Lead	<0.45		1.0	0.45	ug/L		11/09/21 14:00	11/10/21 22:23	1
Lithium	**14**		8.0	1.7	ug/L		11/09/21 14:00	11/10/21 22:23	1
Molybdenum	<1.1		5.0	1.1	ug/L		11/09/21 14:00	11/10/21 22:23	1
Selenium	<0.89		5.0	0.89	ug/L		11/09/21 14:00	11/10/21 22:23	1
Thallium	<0.20		1.0	0.20	ug/L		11/09/21 14:00	11/10/21 22:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**95**		1.0	0.28	mg/L			11/27/21 21:53	1
Fluoride	**0.11**		0.050	0.024	mg/L			11/27/21 21:53	1
Sulfate	**9.6**		1.0	0.35	mg/L			11/27/21 21:53	1
Total Dissolved Solids	**270**		10	10	mg/L			11/11/21 17:25	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.394**		0.169	0.173	1.00	0.197	pCi/L	11/12/21 09:23	12/06/21 13:26	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.2*		*40 - 110*	*11/12/21 09:23*	*12/06/21 13:26*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.485	U	0.411	0.414	1.00	0.657	pCi/L	11/12/21 10:48	12/01/21 14:12	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.2*		*40 - 110*	*11/12/21 10:48*	*12/01/21 14:12*	*1*
Y Carrier	*83.4*		*40 - 110*	*11/12/21 10:48*	*12/01/21 14:12*	*1*

Method: Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**0.879**		0.444	0.449	5.00	0.657	pCi/L		12/15/21 17:43	1

Client Sample ID: 110421NOW-8 — Lab Sample ID: 240-159571-2

Date Collected: 11/04/21 10:50 — **Matrix: Water**
Date Received: 11/06/21 10:30

Method: 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**100**		100	57	ug/L		11/09/21 14:00	11/10/21 21:20	1

Method: 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.75		5.0	0.75	ug/L		11/09/21 14:00	11/10/21 22:25	1
Barium	**11**		5.0	2.2	ug/L		11/09/21 14:00	11/10/21 22:25	1
Beryllium	<0.62		1.0	0.62	ug/L		11/09/21 14:00	11/10/21 22:25	1
Cadmium	<0.20		1.0	0.20	ug/L		11/09/21 14:00	11/10/21 22:25	1
Calcium	**310000**		1000	580	ug/L		11/09/21 14:00	11/10/21 22:25	1
Chromium	<2.5		5.0	2.5	ug/L		11/09/21 14:00	11/10/21 22:25	1
Cobalt	**25**		1.0	0.19	ug/L		11/09/21 14:00	11/10/21 22:25	1
Lead	<0.45		1.0	0.45	ug/L		11/09/21 14:00	11/10/21 22:25	1
Lithium	**8.7**		8.0	1.7	ug/L		11/09/21 14:00	11/10/21 22:25	1
Molybdenum	<1.1		5.0	1.1	ug/L		11/09/21 14:00	11/10/21 22:25	1
Selenium	<0.89		5.0	0.89	ug/L		11/09/21 14:00	11/10/21 22:25	1
Thallium	<0.20		1.0	0.20	ug/L		11/09/21 14:00	11/10/21 22:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**190**		1.0	0.28	mg/L			11/27/21 22:13	1
Fluoride	**0.050**		0.050	0.024	mg/L			11/27/21 22:13	1
Sulfate	**690**		5.0	1.7	mg/L			11/27/21 22:33	5
Total Dissolved Solids	**1500**		10	10	mg/L			11/11/21 17:25	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0226	U	0.135	0.135	1.00	0.257	pCi/L	11/12/21 09:23	12/06/21 13:26	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.0*		*40 - 110*	*11/12/21 09:23*	*12/06/21 13:26*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0594	U	0.491	0.491	1.00	0.879	pCi/L	11/12/21 10:48	12/01/21 14:12	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.0*		*40 - 110*	*11/12/21 10:48*	*12/01/21 14:12*	*1*
Y Carrier	*85.2*		*40 - 110*	*11/12/21 10:48*	*12/01/21 14:12*	*1*

Method: Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.0226	U	0.509	0.509	5.00	0.879	pCi/L		12/15/21 17:43	1

Client Sample ID: 110421NOW-2A
Date Collected: 11/04/21 15:10
Date Received: 11/06/21 10:30

Lab Sample ID: 240-159571-3
Matrix: Water

Method: 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	99	J	100	57	ug/L		11/09/21 14:00	11/10/21 21:25	1

Method: 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.7	J	5.0	0.75	ug/L		11/09/21 14:00	11/10/21 22:28	1
Barium	200		5.0	2.2	ug/L		11/09/21 14:00	11/10/21 22:28	1
Beryllium	<0.62		1.0	0.62	ug/L		11/09/21 14:00	11/10/21 22:28	1
Cadmium	3.9		1.0	0.20	ug/L		11/09/21 14:00	11/10/21 22:28	1
Calcium	59000		1000	580	ug/L		11/09/21 14:00	11/10/21 22:28	1
Chromium	<2.5		5.0	2.5	ug/L		11/09/21 14:00	11/10/21 22:28	1
Cobalt	180		1.0	0.19	ug/L		11/09/21 14:00	11/10/21 22:28	1
Lead	0.94	J	1.0	0.45	ug/L		11/09/21 14:00	11/10/21 22:28	1
Lithium	2.6	J	8.0	1.7	ug/L		11/09/21 14:00	11/10/21 22:28	1
Molybdenum	1.3	J	5.0	1.1	ug/L		11/09/21 14:00	11/10/21 22:28	1
Selenium	<0.89		5.0	0.89	ug/L		11/09/21 14:00	11/10/21 22:28	1
Thallium	<0.20		1.0	0.20	ug/L		11/09/21 14:00	11/10/21 22:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	49		1.0	0.28	mg/L			11/27/21 22:54	1
Fluoride	0.036	J	0.050	0.024	mg/L			11/27/21 22:54	1
Sulfate	80		1.0	0.35	mg/L			11/27/21 22:54	1
Total Dissolved Solids	350		10	10	mg/L			11/11/21 17:25	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.694		0.262	0.269	1.00	0.300	pCi/L	11/12/21 09:23	12/06/21 13:26	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*65.1*		*40 - 110*	*11/12/21 09:23*	*12/06/21 13:26*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.111	U G	0.560	0.560	1.00	1.02	pCi/L	11/12/21 10:48	12/01/21 14:12	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*65.1*		*40 - 110*	*11/12/21 10:48*	*12/01/21 14:12*	*1*
Y Carrier	*81.1*		*40 - 110*	*11/12/21 10:48*	*12/01/21 14:12*	*1*

Method: Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.694	U	0.618	0.621	5.00	1.02	pCi/L		12/15/21 17:43	1

Client Sample ID: 110421NOW-4A
Date Collected: 11/04/21 14:05
Date Received: 11/06/21 10:30

Lab Sample ID: 240-159571-4
Matrix: Water

Method: 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	85	J	100	57	ug/L		11/09/21 14:00	11/10/21 21:29	1

Method: 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.5	J	5.0	0.75	ug/L		11/09/21 14:00	11/10/21 22:30	1
Barium	79		5.0	2.2	ug/L		11/09/21 14:00	11/10/21 22:30	1
Beryllium	<0.62		1.0	0.62	ug/L		11/09/21 14:00	11/10/21 22:30	1
Cadmium	<0.20		1.0	0.20	ug/L		11/09/21 14:00	11/10/21 22:30	1
Calcium	24000		1000	580	ug/L		11/09/21 14:00	11/10/21 22:30	1
Chromium	<2.5		5.0	2.5	ug/L		11/09/21 14:00	11/10/21 22:30	1
Cobalt	0.34	J	1.0	0.19	ug/L		11/09/21 14:00	11/10/21 22:30	1
Lead	<0.45		1.0	0.45	ug/L		11/09/21 14:00	11/10/21 22:30	1
Lithium	1.9	J	8.0	1.7	ug/L		11/09/21 14:00	11/10/21 22:30	1
Molybdenum	1.4	J	5.0	1.1	ug/L		11/09/21 14:00	11/10/21 22:30	1
Selenium	<0.89		5.0	0.89	ug/L		11/09/21 14:00	11/10/21 22:30	1
Thallium	<0.20		1.0	0.20	ug/L		11/09/21 14:00	11/10/21 22:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.8		1.0	0.28	mg/L			11/27/21 23:14	1
Fluoride	0.074		0.050	0.024	mg/L			11/27/21 23:14	1
Sulfate	42		1.0	0.35	mg/L			11/27/21 23:14	1
Total Dissolved Solids	110		10	10	mg/L			11/11/21 17:25	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.149	U	0.145	0.146	1.00	0.229	pCi/L	11/12/21 09:23	12/06/21 13:26	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.8*		*40 - 110*	*11/12/21 09:23*	*12/06/21 13:26*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.275	U	0.396	0.397	1.00	0.665	pCi/L	11/12/21 10:48	12/01/21 14:12	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.8*		*40 - 110*	*11/12/21 10:48*	*12/01/21 14:12*	*1*
Y Carrier	*83.7*		*40 - 110*	*11/12/21 10:48*	*12/01/21 14:12*	*1*

Method: Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.424	U	0.422	0.423	5.00	0.665	pCi/L		12/15/21 17:43	1

Client Sample ID: 110421NOW-10 Lab Sample ID: 240-159571-5

Date Collected: 11/04/21 12:05 **Matrix: Water**
Date Received: 11/06/21 10:30

Method: 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**97**	**J**	100	57	ug/L		11/09/21 14:00	11/10/21 20:13	1

Method: 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**1.0**	**J**	5.0	0.75	ug/L		11/09/21 14:00	11/10/21 21:48	1
Barium	**280**		5.0	2.2	ug/L		11/09/21 14:00	11/10/21 21:48	1
Beryllium	<0.62		1.0	0.62	ug/L		11/09/21 14:00	11/10/21 21:48	1
Cadmium	<0.20		1.0	0.20	ug/L		11/09/21 14:00	11/10/21 21:48	1
Calcium	**39000**		1000	580	ug/L		11/09/21 14:00	11/10/21 21:48	1
Chromium	<2.5		5.0	2.5	ug/L		11/09/21 14:00	11/10/21 21:48	1
Cobalt	**0.23**	**J**	1.0	0.19	ug/L		11/09/21 14:00	11/10/21 21:48	1
Lead	<0.45		1.0	0.45	ug/L		11/09/21 14:00	11/10/21 21:48	1
Lithium	**8.8**		8.0	1.7	ug/L		11/09/21 14:00	11/10/21 21:48	1
Molybdenum	<1.1		5.0	1.1	ug/L		11/09/21 14:00	11/10/21 21:48	1
Selenium	<0.89		5.0	0.89	ug/L		11/09/21 14:00	11/10/21 21:48	1
Thallium	**0.62**	**J**	1.0	0.20	ug/L		11/09/21 14:00	11/10/21 21:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6.7**		1.0	0.28	mg/L			11/28/21 05:05	1
Fluoride	**0.21**		0.050	0.024	mg/L			11/28/21 05:05	1
Sulfate	<0.35		1.0	0.35	mg/L			11/28/21 05:05	1
Total Dissolved Solids	**200**		10	10	mg/L			11/11/21 17:25	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.209**		0.134	0.136	1.00	0.180	pCi/L	11/12/21 09:23	12/06/21 13:27	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.6*		*40 - 110*	*11/12/21 09:23*	*12/06/21 13:27*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.291	U	0.404	0.405	1.00	0.674	pCi/L	11/12/21 10:48	12/01/21 14:13	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.6*		*40 - 110*	*11/12/21 10:48*	*12/01/21 14:13*	*1*
Y Carrier	*87.5*		*40 - 110*	*11/12/21 10:48*	*12/01/21 14:13*	*1*

Method: Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.501	U	0.426	0.427	5.00	0.674	pCi/L		12/15/21 17:43	1

Client Sample ID: 110421NOW-12 Lab Sample ID: 240-159571-6

Date Collected: 11/04/21 15:40 **Matrix: Water**
Date Received: 11/06/21 10:30

Method: 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**260**		100	57	ug/L		11/09/21 14:00	11/10/21 21:42	1

Method: 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**2.4**	**J**	5.0	0.75	ug/L		11/09/21 14:00	11/10/21 22:32	1
Barium	**59**		5.0	2.2	ug/L		11/09/21 14:00	11/10/21 22:32	1
Beryllium	<0.62		1.0	0.62	ug/L		11/09/21 14:00	11/10/21 22:32	1
Cadmium	<0.20		1.0	0.20	ug/L		11/09/21 14:00	11/10/21 22:32	1
Calcium	**88000**		1000	580	ug/L		11/09/21 14:00	11/10/21 22:32	1
Chromium	<2.5		5.0	2.5	ug/L		11/09/21 14:00	11/10/21 22:32	1
Cobalt	**49**		1.0	0.19	ug/L		11/09/21 14:00	11/10/21 22:32	1
Lead	<0.45		1.0	0.45	ug/L		11/09/21 14:00	11/10/21 22:32	1
Lithium	**2.4**	**J**	8.0	1.7	ug/L		11/09/21 14:00	11/10/21 22:32	1
Molybdenum	**3.3**	**J**	5.0	1.1	ug/L		11/09/21 14:00	11/10/21 22:32	1
Selenium	<0.89		5.0	0.89	ug/L		11/09/21 14:00	11/10/21 22:32	1
Thallium	<0.20		1.0	0.20	ug/L		11/09/21 14:00	11/10/21 22:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**110**		1.0	0.28	mg/L			11/28/21 06:10	1
Fluoride	**0.056**		0.050	0.024	mg/L			11/28/21 06:10	1
Sulfate	**240**		5.0	1.7	mg/L			11/28/21 06:32	5
Total Dissolved Solids	**610**		10	10	mg/L			11/11/21 17:25	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.311**		0.180	0.182	1.00	0.246	pCi/L	11/12/21 09:23	12/06/21 13:27	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.4*		*40 - 110*	*11/12/21 09:23*	*12/06/21 13:27*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.325	U	0.378	0.379	1.00	0.622	pCi/L	11/12/21 10:48	12/01/21 14:13	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.4*		*40 - 110*	*11/12/21 10:48*	*12/01/21 14:13*	*1*
Y Carrier	*86.0*		*40 - 110*	*11/12/21 10:48*	*12/01/21 14:13*	*1*

Method: Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**0.637**		0.419	0.420	5.00	0.622	pCi/L		12/15/21 17:43	1

Client Sample ID: 110421NOW-13 Lab Sample ID: 240-159571-7

Date Collected: 11/04/21 12:05 **Matrix: Water**
Date Received: 11/06/21 10:30

Method: 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**65**	**J**	100	57	ug/L		11/09/21 14:00	11/10/21 21:46	1

Method: 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**8.0**		5.0	0.75	ug/L		11/09/21 14:00	11/10/21 22:40	1
Barium	**170**		5.0	2.2	ug/L		11/09/21 14:00	11/10/21 22:40	1
Beryllium	<0.62		1.0	0.62	ug/L		11/09/21 14:00	11/10/21 22:40	1
Cadmium	<0.20		1.0	0.20	ug/L		11/09/21 14:00	11/10/21 22:40	1
Calcium	**20000**		1000	580	ug/L		11/09/21 14:00	11/10/21 22:40	1
Chromium	**5.5**		5.0	2.5	ug/L		11/09/21 14:00	11/10/21 22:40	1
Cobalt	**4.1**		1.0	0.19	ug/L		11/09/21 14:00	11/10/21 22:40	1
Lead	**0.56**	**J**	1.0	0.45	ug/L		11/09/21 14:00	11/10/21 22:40	1
Lithium	<1.7		8.0	1.7	ug/L		11/09/21 14:00	11/10/21 22:40	1
Molybdenum	<1.1		5.0	1.1	ug/L		11/09/21 14:00	11/10/21 22:40	1
Selenium	**1.2**	**J**	5.0	0.89	ug/L		11/09/21 14:00	11/10/21 22:40	1
Thallium	<0.20		1.0	0.20	ug/L		11/09/21 14:00	11/10/21 22:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**23**		1.0	0.28	mg/L			11/28/21 06:54	1
Fluoride	**0.044**	**J**	0.050	0.024	mg/L			11/28/21 06:54	1
Sulfate	<0.35		1.0	0.35	mg/L			11/28/21 06:54	1
Total Dissolved Solids	**380**		10	10	mg/L			11/11/21 17:25	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.501**		0.254	0.258	1.00	0.321	pCi/L	11/12/21 09:23	12/06/21 13:27	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.3*		*40 - 110*	*11/12/21 09:23*	*12/06/21 13:27*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.689	U G	0.711	0.714	1.00	1.16	pCi/L	11/12/21 10:48	12/01/21 14:14	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.3*		*40 - 110*	*11/12/21 10:48*	*12/01/21 14:14*	*1*
Y Carrier	*85.2*		*40 - 110*	*11/12/21 10:48*	*12/01/21 14:14*	*1*

Method: Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	**1.19**		0.755	0.759	5.00	1.16	pCi/L		12/15/21 17:43	1

Client Sample ID: 110421FBFieldBlank

Lab Sample ID: 240-159571-8

Date Collected: 11/04/21 14:10

Matrix: Water

Date Received: 11/06/21 10:30

Method: 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<57		100	57	ug/L		11/09/21 14:00	11/10/21 21:50	1

Method: 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.75		5.0	0.75	ug/L		11/09/21 14:00	11/10/21 22:42	1
Barium	<2.2		5.0	2.2	ug/L		11/09/21 14:00	11/10/21 22:42	1
Beryllium	<0.62		1.0	0.62	ug/L		11/09/21 14:00	11/10/21 22:42	1
Cadmium	<0.20		1.0	0.20	ug/L		11/09/21 14:00	11/10/21 22:42	1
Calcium	<580		1000	580	ug/L		11/09/21 14:00	11/10/21 22:42	1
Chromium	<2.5		5.0	2.5	ug/L		11/09/21 14:00	11/10/21 22:42	1
Cobalt	<0.19		1.0	0.19	ug/L		11/09/21 14:00	11/10/21 22:42	1
Lead	<0.45		1.0	0.45	ug/L		11/09/21 14:00	11/10/21 22:42	1
Lithium	<1.7		8.0	1.7	ug/L		11/09/21 14:00	11/10/21 22:42	1
Molybdenum	<1.1		5.0	1.1	ug/L		11/09/21 14:00	11/10/21 22:42	1
Selenium	<0.89		5.0	0.89	ug/L		11/09/21 14:00	11/10/21 22:42	1
Thallium	<0.20		1.0	0.20	ug/L		11/09/21 14:00	11/10/21 22:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.28		1.0	0.28	mg/L			11/28/21 07:15	1
Fluoride	<0.024		0.050	0.024	mg/L			11/28/21 07:15	1
Sulfate	<0.35		1.0	0.35	mg/L			11/28/21 07:15	1
Total Dissolved Solids	<10		10	10	mg/L			11/11/21 17:25	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0662	U	0.0981	0.0983	1.00	0.167	pCi/L	11/12/21 09:23	12/06/21 13:28	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.4*		*40 - 110*	*11/12/21 09:23*	*12/06/21 13:28*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.136	U	0.217	0.217	1.00	0.424	pCi/L	11/12/21 10:48	12/01/21 14:14	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.4*		*40 - 110*	*11/12/21 10:48*	*12/01/21 14:14*	*1*
Y Carrier	*86.7*		*40 - 110*	*11/12/21 10:48*	*12/01/21 14:14*	*1*

Method: Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.0662	U	0.238	0.238	5.00	0.424	pCi/L		12/15/21 17:43	1

Client Sample ID: 110421FDDuplicate

Lab Sample ID: 240-159571-9

Date Collected: 11/04/21 14:20

Matrix: Water

Date Received: 11/06/21 10:30

Method: 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**82**	**J**	100	57	ug/L		11/09/21 14:00	11/10/21 21:55	1

Method: 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**1.6**	**J**	5.0	0.75	ug/L		11/09/21 14:00	11/10/21 22:45	1
Barium	**74**		5.0	2.2	ug/L		11/09/21 14:00	11/10/21 22:45	1
Beryllium	<0.62		1.0	0.62	ug/L		11/09/21 14:00	11/10/21 22:45	1
Cadmium	<0.20		1.0	0.20	ug/L		11/09/21 14:00	11/10/21 22:45	1
Calcium	**24000**		1000	580	ug/L		11/09/21 14:00	11/10/21 22:45	1
Chromium	<2.5		5.0	2.5	ug/L		11/09/21 14:00	11/10/21 22:45	1
Cobalt	**0.34**	**J**	1.0	0.19	ug/L		11/09/21 14:00	11/10/21 22:45	1
Lead	<0.45		1.0	0.45	ug/L		11/09/21 14:00	11/10/21 22:45	1
Lithium	**2.3**	**J**	8.0	1.7	ug/L		11/09/21 14:00	11/10/21 22:45	1
Molybdenum	**1.5**	**J**	5.0	1.1	ug/L		11/09/21 14:00	11/10/21 22:45	1
Selenium	<0.89		5.0	0.89	ug/L		11/09/21 14:00	11/10/21 22:45	1
Thallium	<0.20		1.0	0.20	ug/L		11/09/21 14:00	11/10/21 22:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.1**		1.0	0.28	mg/L			11/28/21 07:37	1
Fluoride	**0.10**		0.050	0.024	mg/L			11/28/21 07:37	1
Sulfate	**46**		1.0	0.35	mg/L			11/28/21 07:37	1
Total Dissolved Solids	**110**		10	10	mg/L			11/11/21 17:25	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.262**		0.156	0.158	1.00	0.207	pCi/L	11/12/21 09:23	12/06/21 13:28	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.8*		*40 - 110*	*11/12/21 09:23*	*12/06/21 13:28*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.240	U	0.396	0.397	1.00	0.670	pCi/L	11/12/21 10:48	12/01/21 14:14	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.8*		*40 - 110*	*11/12/21 10:48*	*12/01/21 14:14*	*1*
Y Carrier	*89.0*		*40 - 110*	*11/12/21 10:48*	*12/01/21 14:14*	*1*

Method: Ra226_Ra228 Pos - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium 226 and 228	0.502	U	0.426	0.427	5.00	0.670	pCi/L		12/15/21 17:43	1

Tracer/Carrier Summary

Client: Dominion Energy Services, Inc.
Project/Site: Mount Storm Power Station

Job ID: 240-159571-1
SDG: Low Volume Waste Settling Ponds (LVWSP) CCR

Method: 9315 - Radium-226 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)
Lab Sample ID	Client Sample ID	Ba (40-110)
240-159571-1	110421NOW-7A	93.2
240-159571-2	110421NOW-8	79.0
240-159571-3	110421NOW-2A	65.1
240-159571-4	110421NOW-4A	86.8
240-159571-5	110421NOW-10	88.6
240-159571-5 MS	110421NOW-10	88.9
240-159571-5 MSD	110421NOW-10	88.6
240-159571-6	110421NOW-12	89.4
240-159571-7	110421NOW-13	81.3
240-159571-8	110421FBFieldBlank	91.4
240-159571-9	110421FDDuplicate	87.8
500-207904-D-1-B DU	Duplicate	63.5
LCS 160-536245/1-A	Lab Control Sample	87.6
MB 160-536245/25-A	Method Blank	91.4

Tracer/Carrier Legend

Ba = Ba Carrier

Method: 9320 - Radium-228 (GFPC)

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)	
Lab Sample ID	Client Sample ID	Ba (40-110)	Y (40-110)
240-159571-1	110421NOW-7A	93.2	83.4
240-159571-2	110421NOW-8	79.0	85.2
240-159571-3	110421NOW-2A	65.1	81.1
240-159571-4	110421NOW-4A	86.8	83.7
240-159571-5	110421NOW-10	88.6	87.5
240-159571-5 MS	110421NOW-10	88.9	85.6
240-159571-5 MSD	110421NOW-10	88.6	83.7
240-159571-6	110421NOW-12	89.4	86.0
240-159571-7	110421NOW-13	81.3	85.2
240-159571-8	110421FBFieldBlank	91.4	86.7
240-159571-9	110421FDDuplicate	87.8	89.0
500-207904-D-1-C DU	Duplicate	63.5	87.9
LCS 160-536394/1-A	Lab Control Sample	87.6	82.2
MB 160-536394/25-A	Method Blank	91.4	83.7

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-512106/1-A
Matrix: Water
Analysis Batch: 512465

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 512106

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<57		100	57	ug/L		11/09/21 14:00	11/10/21 19:36	1

Lab Sample ID: LCS 240-512106/2-A
Matrix: Water
Analysis Batch: 512465

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 512106

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	1000	1000		ug/L		100	80 - 120

Lab Sample ID: 240-159571-5 MS
Matrix: Water
Analysis Batch: 512465

Client Sample ID: 110421NOW-10
Prep Type: Total Recoverable
Prep Batch: 512106

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	97	J	1000	1140		ug/L		104	75 - 125

Lab Sample ID: 240-159571-5 MSD
Matrix: Water
Analysis Batch: 512465

Client Sample ID: 110421NOW-10
Prep Type: Total Recoverable
Prep Batch: 512106

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Boron	97	J	1000	1160		ug/L		106	75 - 125	2	20

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-512106/1-A
Matrix: Water
Analysis Batch: 512444

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 512106

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.75		5.0	0.75	ug/L		11/09/21 14:00	11/10/21 21:26	1
Barium	<2.2		5.0	2.2	ug/L		11/09/21 14:00	11/10/21 21:26	1
Beryllium	<0.62		1.0	0.62	ug/L		11/09/21 14:00	11/10/21 21:26	1
Cadmium	<0.20		1.0	0.20	ug/L		11/09/21 14:00	11/10/21 21:26	1
Calcium	<580		1000	580	ug/L		11/09/21 14:00	11/10/21 21:26	1
Chromium	<2.5		5.0	2.5	ug/L		11/09/21 14:00	11/10/21 21:26	1
Cobalt	<0.19		1.0	0.19	ug/L		11/09/21 14:00	11/10/21 21:26	1
Lead	<0.45		1.0	0.45	ug/L		11/09/21 14:00	11/10/21 21:26	1
Lithium	<1.7		8.0	1.7	ug/L		11/09/21 14:00	11/10/21 21:26	1
Molybdenum	<1.1		5.0	1.1	ug/L		11/09/21 14:00	11/10/21 21:26	1
Selenium	<0.89		5.0	0.89	ug/L		11/09/21 14:00	11/10/21 21:26	1
Thallium	<0.20		1.0	0.20	ug/L		11/09/21 14:00	11/10/21 21:26	1

Lab Sample ID: LCS 240-512106/3-A
Matrix: Water
Analysis Batch: 512444

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 512106

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1000	1060		ug/L		106	80 - 120
Barium	1000	984		ug/L		98	80 - 120

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 240-512106/3-A
Matrix: Water
Analysis Batch: 512444

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 512106

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Beryllium	500	508		ug/L		102	80 - 120
Cadmium	500	494		ug/L		99	80 - 120
Calcium	25000	25300		ug/L		101	80 - 120
Chromium	500	502		ug/L		100	80 - 120
Cobalt	500	523		ug/L		105	80 - 120
Lead	500	513		ug/L		103	80 - 120
Lithium	500	514		ug/L		103	80 - 120
Molybdenum	500	510		ug/L		102	80 - 120
Selenium	1000	1010		ug/L		101	80 - 120
Thallium	1000	998		ug/L		100	80 - 120

Lab Sample ID: 240-159571-5 MS
Matrix: Water
Analysis Batch: 512444

Client Sample ID: 110421NOW-10
Prep Type: Total Recoverable
Prep Batch: 512106

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1.0	J	1000	1060		ug/L		106	80 - 120
Barium	280		1000	1370		ug/L		109	80 - 120
Beryllium	<0.62		500	492		ug/L		98	80 - 120
Cadmium	<0.20		500	503		ug/L		101	80 - 120
Calcium	39000		25000	65200		ug/L		103	80 - 120
Chromium	<2.5		500	523		ug/L		105	80 - 120
Cobalt	0.23	J	500	521		ug/L		104	80 - 120
Lead	<0.45		500	528		ug/L		106	80 - 120
Lithium	8.8		500	525		ug/L		103	80 - 120
Molybdenum	<1.1		500	527		ug/L		105	80 - 120
Selenium	<0.89		1000	992		ug/L		99	80 - 120
Thallium	0.62	J	1000	1010		ug/L		101	80 - 120

Lab Sample ID: 240-159571-5 MSD
Matrix: Water
Analysis Batch: 512444

Client Sample ID: 110421NOW-10
Prep Type: Total Recoverable
Prep Batch: 512106

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	1.0	J	1000	1050		ug/L		105	80 - 120	1	20
Barium	280		1000	1350		ug/L		107	80 - 120	1	20
Beryllium	<0.62		500	487		ug/L		97	80 - 120	1	20
Cadmium	<0.20		500	504		ug/L		101	80 - 120	0	20
Calcium	39000		25000	64000		ug/L		98	80 - 120	2	20
Chromium	<2.5		500	513		ug/L		103	80 - 120	2	20
Cobalt	0.23	J	500	521		ug/L		104	80 - 120	0	20
Lead	<0.45		500	521		ug/L		104	80 - 120	1	20
Lithium	8.8		500	528		ug/L		104	80 - 120	0	20
Molybdenum	<1.1		500	522		ug/L		104	80 - 120	1	20
Selenium	<0.89		1000	990		ug/L		99	80 - 120	0	20
Thallium	0.62	J	1000	1010		ug/L		101	80 - 120	0	20

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 240-514731/3
Matrix: Water
Analysis Batch: 514731

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.28		1.0	0.28	mg/L			11/27/21 13:10	1
Fluoride	<0.024		0.050	0.024	mg/L			11/27/21 13:10	1
Sulfate	<0.35		1.0	0.35	mg/L			11/27/21 13:10	1

Lab Sample ID: LCS 240-514731/4
Matrix: Water
Analysis Batch: 514731

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	52.6		mg/L		105	90 - 110
Fluoride	2.50	2.57		mg/L		103	90 - 110
Sulfate	50.0	51.1		mg/L		102	90 - 110

Lab Sample ID: 240-159547-D-1 MS
Matrix: Water
Analysis Batch: 514731

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	0.63	J	50.0	54.2		mg/L		107	80 - 120
Fluoride	0.035	J	2.50	2.60		mg/L		103	80 - 120
Sulfate	25		50.0	76.3		mg/L		103	80 - 120

Lab Sample ID: 240-159547-D-1 MSD
Matrix: Water
Analysis Batch: 514731

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	0.63	J	50.0	56.1		mg/L		111	80 - 120	4	15
Fluoride	0.035	J	2.50	2.70		mg/L		107	80 - 120	4	15
Sulfate	25		50.0	78.2		mg/L		107	80 - 120	2	15

Lab Sample ID: MB 240-514732/3
Matrix: Water
Analysis Batch: 514732

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.28		1.0	0.28	mg/L			11/28/21 04:22	1
Fluoride	<0.024		0.050	0.024	mg/L			11/28/21 04:22	1
Sulfate	<0.35		1.0	0.35	mg/L			11/28/21 04:22	1

Lab Sample ID: LCS 240-514732/4
Matrix: Water
Analysis Batch: 514732

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	52.0		mg/L		104	90 - 110
Fluoride	2.50	2.66		mg/L		106	90 - 110
Sulfate	50.0	53.1		mg/L		106	90 - 110

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: 240-159571-5 MS
Matrix: Water
Analysis Batch: 514732

Client Sample ID: 110421NOW-10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	6.7		50.0	63.2		mg/L		113	80 - 120
Fluoride	0.21		2.50	3.15		mg/L		118	80 - 120
Sulfate	<0.35		50.0	54.8		mg/L		110	80 - 120

Lab Sample ID: 240-159571-5 MSD
Matrix: Water
Analysis Batch: 514732

Client Sample ID: 110421NOW-10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	6.7		50.0	63.3		mg/L		113	80 - 120	0	15
Fluoride	0.21		2.50	3.17		mg/L		118	80 - 120	1	15
Sulfate	<0.35		50.0	54.9		mg/L		110	80 - 120	0	15

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: LB 180-378032/1-A
Matrix: Water
Analysis Batch: 378659

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			11/11/21 17:25	1

Lab Sample ID: MB 180-378659/2
Matrix: Water
Analysis Batch: 378659

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	10	mg/L			11/11/21 17:25	1

Lab Sample ID: LCS 180-378659/1
Matrix: Water
Analysis Batch: 378659

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	422	426		mg/L		101	80 - 120

Lab Sample ID: 180-129421-C-1 DU
Matrix: Water
Analysis Batch: 378659

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	290		289		mg/L		0.7	10

Lab Sample ID: 240-159571-7 DU
Matrix: Water
Analysis Batch: 378659

Client Sample ID: 110421NOW-13
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	380		390		mg/L		3	10

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-536245/25-A
Matrix: Water
Analysis Batch: 540390

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 536245

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.2158		0.132	0.133	1.00	0.173	pCi/L	11/12/21 09:23	12/06/21 13:34	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.4*		*40 - 110*	*11/12/21 09:23*	*12/06/21 13:34*	*1*

Lab Sample ID: LCS 160-536245/1-A
Matrix: Water
Analysis Batch: 540407

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 536245

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			15.1	14.10		1.53	1.00	0.194	pCi/L	93	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*87.6*		*40 - 110*

Lab Sample ID: 240-159571-5 MS
Matrix: Water
Analysis Batch: 540407

Client Sample ID: 110421NOW-10
Prep Type: Total/NA
Prep Batch: 536245

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226	0.209		15.1	14.08		1.52	1.00	0.174	pCi/L	92	60 - 140		

Carrier	*MS %Yield*	*MS Qualifier*	*Limits*
Ba Carrier	*88.9*		*40 - 110*

Lab Sample ID: 240-159571-5 MSD
Matrix: Water
Analysis Batch: 540407

Client Sample ID: 110421NOW-10
Prep Type: Total/NA
Prep Batch: 536245

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-226	0.209		15.1	14.81		1.59	1.00	0.185	pCi/L	96	60 - 140	0.23	1

Carrier	*MSD %Yield*	*MSD Qualifier*	*Limits*
Ba Carrier	*88.6*		*40 - 110*

Lab Sample ID: 500-207904-D-1-B DU
Matrix: Water
Analysis Batch: 540407

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 536245

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-226	0.137	U		0.1390	U	0.130	1.00	0.200	pCi/L			0.01	1

Method: 9315 - Radium-226 (GFPC) (Continued)

Lab Sample ID: 500-207904-D-1-B DU
Matrix: Water
Analysis Batch: 540407

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 536245

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	63.5		40 - 110

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-536394/25-A
Matrix: Water
Analysis Batch: 539996

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 536394

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.2173	U	0.415	0.416	1.00	0.706	pCi/L	11/12/21 10:48	12/01/21 14:18	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	91.4		40 - 110	11/12/21 10:48	12/01/21 14:18	1
Y Carrier	83.7		40 - 110	11/12/21 10:48	12/01/21 14:18	1

Lab Sample ID: LCS 160-536394/1-A
Matrix: Water
Analysis Batch: 539784

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 536394

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			12.1	11.61		1.48	1.00	0.678	pCi/L	96	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	87.6		40 - 110
Y Carrier	82.2		40 - 110

Lab Sample ID: 240-159571-5 MS
Matrix: Water
Analysis Batch: 539784

Client Sample ID: 110421NOW-10
Prep Type: Total/NA
Prep Batch: 536394

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228	0.291	U	12.1	11.18		1.43	1.00	0.709	pCi/L	90	60 - 140		

Carrier	MS %Yield	MS Qualifier	Limits
Ba Carrier	88.9		40 - 110
Y Carrier	85.6		40 - 110

Lab Sample ID: 240-159571-5 MSD
Matrix: Water
Analysis Batch: 539784

Client Sample ID: 110421NOW-10
Prep Type: Total/NA
Prep Batch: 536394

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228	0.291	U	12.1	12.25		1.53	1.00	0.682	pCi/L	99	60 - 140	0.36	1

Method: 9320 - Radium-228 (GFPC) (Continued)

Lab Sample ID: 240-159571-5 MSD
Matrix: Water
Analysis Batch: 539784

Client Sample ID: 110421NOW-10
Prep Type: Total/NA
Prep Batch: 536394

Carrier	MSD %Yield	MSD Qualifier	Limits
Ba Carrier	88.6		40 - 110
Y Carrier	83.7		40 - 110

Lab Sample ID: 500-207904-D-1-C DU
Matrix: Water
Analysis Batch: 539784

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 536394

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-228	0.286	U		0.5304	U	0.412	1.00	0.643	pCi/L			0.33	1

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	63.5		40 - 110
Y Carrier	87.9		40 - 110

Metals

Prep Batch: 512106

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-159571-1	110421NOW-7A	Total Recoverable	Water	3005A	
240-159571-2	110421NOW-8	Total Recoverable	Water	3005A	
240-159571-3	110421NOW-2A	Total Recoverable	Water	3005A	
240-159571-4	110421NOW-4A	Total Recoverable	Water	3005A	
240-159571-5	110421NOW-10	Total Recoverable	Water	3005A	
240-159571-6	110421NOW-12	Total Recoverable	Water	3005A	
240-159571-7	110421NOW-13	Total Recoverable	Water	3005A	
240-159571-8	110421FBFieldBlank	Total Recoverable	Water	3005A	
240-159571-9	110421FDDuplicate	Total Recoverable	Water	3005A	
MB 240-512106/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-512106/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-512106/3-A	Lab Control Sample	Total Recoverable	Water	3005A	
240-159571-5 MS	110421NOW-10	Total Recoverable	Water	3005A	
240-159571-5 MS	110421NOW-10	Total Recoverable	Water	3005A	
240-159571-5 MSD	110421NOW-10	Total Recoverable	Water	3005A	
240-159571-5 MSD	110421NOW-10	Total Recoverable	Water	3005A	

Analysis Batch: 512444

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-159571-1	110421NOW-7A	Total Recoverable	Water	6020B	512106
240-159571-2	110421NOW-8	Total Recoverable	Water	6020B	512106
240-159571-3	110421NOW-2A	Total Recoverable	Water	6020B	512106
240-159571-4	110421NOW-4A	Total Recoverable	Water	6020B	512106
240-159571-5	110421NOW-10	Total Recoverable	Water	6020B	512106
240-159571-6	110421NOW-12	Total Recoverable	Water	6020B	512106
240-159571-7	110421NOW-13	Total Recoverable	Water	6020B	512106
240-159571-8	110421FBFieldBlank	Total Recoverable	Water	6020B	512106
240-159571-9	110421FDDuplicate	Total Recoverable	Water	6020B	512106
MB 240-512106/1-A	Method Blank	Total Recoverable	Water	6020B	512106
LCS 240-512106/3-A	Lab Control Sample	Total Recoverable	Water	6020B	512106
240-159571-5 MS	110421NOW-10	Total Recoverable	Water	6020B	512106
240-159571-5 MSD	110421NOW-10	Total Recoverable	Water	6020B	512106

Analysis Batch: 512465

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-159571-1	110421NOW-7A	Total Recoverable	Water	6010D	512106
240-159571-2	110421NOW-8	Total Recoverable	Water	6010D	512106
240-159571-3	110421NOW-2A	Total Recoverable	Water	6010D	512106
240-159571-4	110421NOW-4A	Total Recoverable	Water	6010D	512106
240-159571-5	110421NOW-10	Total Recoverable	Water	6010D	512106
240-159571-6	110421NOW-12	Total Recoverable	Water	6010D	512106
240-159571-7	110421NOW-13	Total Recoverable	Water	6010D	512106
240-159571-8	110421FBFieldBlank	Total Recoverable	Water	6010D	512106
240-159571-9	110421FDDuplicate	Total Recoverable	Water	6010D	512106
MB 240-512106/1-A	Method Blank	Total Recoverable	Water	6010D	512106
LCS 240-512106/2-A	Lab Control Sample	Total Recoverable	Water	6010D	512106
240-159571-5 MS	110421NOW-10	Total Recoverable	Water	6010D	512106
240-159571-5 MSD	110421NOW-10	Total Recoverable	Water	6010D	512106

General Chemistry

Leach Batch: 378032

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 180-378032/1-A	Method Blank	Total/NA	Water	D3987-85	

Analysis Batch: 378659

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-159571-1	110421NOW-7A	Total/NA	Water	SM 2540C	
240-159571-2	110421NOW-8	Total/NA	Water	SM 2540C	
240-159571-3	110421NOW-2A	Total/NA	Water	SM 2540C	
240-159571-4	110421NOW-4A	Total/NA	Water	SM 2540C	
240-159571-5	110421NOW-10	Total/NA	Water	SM 2540C	
240-159571-6	110421NOW-12	Total/NA	Water	SM 2540C	
240-159571-7	110421NOW-13	Total/NA	Water	SM 2540C	
240-159571-8	110421FBFieldBlank	Total/NA	Water	SM 2540C	
240-159571-9	110421FDDuplicate	Total/NA	Water	SM 2540C	
LB 180-378032/1-A	Method Blank	Total/NA	Water	SM 2540C	378032
MB 180-378659/2	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-378659/1	Lab Control Sample	Total/NA	Water	SM 2540C	
180-129421-C-1 DU	Duplicate	Total/NA	Water	SM 2540C	
240-159571-7 DU	110421NOW-13	Total/NA	Water	SM 2540C	

Analysis Batch: 514731

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-159571-1	110421NOW-7A	Total/NA	Water	9056A	
240-159571-2	110421NOW-8	Total/NA	Water	9056A	
240-159571-2	110421NOW-8	Total/NA	Water	9056A	
240-159571-3	110421NOW-2A	Total/NA	Water	9056A	
240-159571-4	110421NOW-4A	Total/NA	Water	9056A	
MB 240-514731/3	Method Blank	Total/NA	Water	9056A	
LCS 240-514731/4	Lab Control Sample	Total/NA	Water	9056A	
240-159547-D-1 MS	Matrix Spike	Total/NA	Water	9056A	
240-159547-D-1 MSD	Matrix Spike Duplicate	Total/NA	Water	9056A	

Analysis Batch: 514732

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-159571-5	110421NOW-10	Total/NA	Water	9056A	
240-159571-6	110421NOW-12	Total/NA	Water	9056A	
240-159571-6	110421NOW-12	Total/NA	Water	9056A	
240-159571-7	110421NOW-13	Total/NA	Water	9056A	
240-159571-8	110421FBFieldBlank	Total/NA	Water	9056A	
240-159571-9	110421FDDuplicate	Total/NA	Water	9056A	
MB 240-514732/3	Method Blank	Total/NA	Water	9056A	
LCS 240-514732/4	Lab Control Sample	Total/NA	Water	9056A	
240-159571-5 MS	110421NOW-10	Total/NA	Water	9056A	
240-159571-5 MSD	110421NOW-10	Total/NA	Water	9056A	

Rad

Prep Batch: 536245

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-159571-1	110421NOW-7A	Total/NA	Water	PrecSep-21	
240-159571-2	110421NOW-8	Total/NA	Water	PrecSep-21	
240-159571-3	110421NOW-2A	Total/NA	Water	PrecSep-21	

Rad (Continued)

Prep Batch: 536245 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-159571-4	110421NOW-4A	Total/NA	Water	PrecSep-21	
240-159571-5	110421NOW-10	Total/NA	Water	PrecSep-21	
240-159571-6	110421NOW-12	Total/NA	Water	PrecSep-21	
240-159571-7	110421NOW-13	Total/NA	Water	PrecSep-21	
240-159571-8	110421FBFieldBlank	Total/NA	Water	PrecSep-21	
240-159571-9	110421FDDuplicate	Total/NA	Water	PrecSep-21	
MB 160-536245/25-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-536245/1-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
240-159571-5 MS	110421NOW-10	Total/NA	Water	PrecSep-21	
240-159571-5 MSD	110421NOW-10	Total/NA	Water	PrecSep-21	
500-207904-D-1-B DU	Duplicate	Total/NA	Water	PrecSep-21	

Prep Batch: 536394

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-159571-1	110421NOW-7A	Total/NA	Water	PrecSep_0	
240-159571-2	110421NOW-8	Total/NA	Water	PrecSep_0	
240-159571-3	110421NOW-2A	Total/NA	Water	PrecSep_0	
240-159571-4	110421NOW-4A	Total/NA	Water	PrecSep_0	
240-159571-5	110421NOW-10	Total/NA	Water	PrecSep_0	
240-159571-6	110421NOW-12	Total/NA	Water	PrecSep_0	
240-159571-7	110421NOW-13	Total/NA	Water	PrecSep_0	
240-159571-8	110421FBFieldBlank	Total/NA	Water	PrecSep_0	
240-159571-9	110421FDDuplicate	Total/NA	Water	PrecSep_0	
MB 160-536394/25-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-536394/1-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
240-159571-5 MS	110421NOW-10	Total/NA	Water	PrecSep_0	
240-159571-5 MSD	110421NOW-10	Total/NA	Water	PrecSep_0	
500-207904-D-1-C DU	Duplicate	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Dominion Energy Services, Inc.
Project/Site: Mount Storm Power Station

Job ID: 240-159571-1
SDG: Low Volume Waste Settling Ponds (LVWSP) CCR

Client Sample ID: 110421NOW-7A
Date Collected: 11/04/21 10:30
Date Received: 11/06/21 10:30

Lab Sample ID: 240-159571-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			512106	11/09/21 14:00	SHB	TAL CAN
Total Recoverable	Analysis	6010D		1	512465	11/10/21 21:16	DSH	TAL CAN
Total Recoverable	Prep	3005A			512106	11/09/21 14:00	SHB	TAL CAN
Total Recoverable	Analysis	6020B		1	512444	11/10/21 22:23	AJC	TAL CAN
Total/NA	Analysis	9056A		1	514731	11/27/21 21:53	JWW	TAL CAN
Total/NA	Analysis	SM 2540C		1	378659	11/11/21 17:25	KMM	TAL PIT
Total/NA	Prep	PrecSep-21			536245	11/12/21 09:23	LPS	TAL SL
Total/NA	Analysis	9315		1	540407	12/06/21 13:26	ANW	TAL SL
Total/NA	Prep	PrecSep_0			536394	11/12/21 10:48	LPS	TAL SL
Total/NA	Analysis	9320		1	539784	12/01/21 14:12	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228 Pos		1	542341	12/15/21 17:43	EMH	TAL SL

Client Sample ID: 110421NOW-8
Date Collected: 11/04/21 10:50
Date Received: 11/06/21 10:30

Lab Sample ID: 240-159571-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			512106	11/09/21 14:00	SHB	TAL CAN
Total Recoverable	Analysis	6010D		1	512465	11/10/21 21:20	DSH	TAL CAN
Total Recoverable	Prep	3005A			512106	11/09/21 14:00	SHB	TAL CAN
Total Recoverable	Analysis	6020B		1	512444	11/10/21 22:25	AJC	TAL CAN
Total/NA	Analysis	9056A		1	514731	11/27/21 22:13	JWW	TAL CAN
Total/NA	Analysis	9056A		5	514731	11/27/21 22:33	JWW	TAL CAN
Total/NA	Analysis	SM 2540C		1	378659	11/11/21 17:25	KMM	TAL PIT
Total/NA	Prep	PrecSep-21			536245	11/12/21 09:23	LPS	TAL SL
Total/NA	Analysis	9315		1	540407	12/06/21 13:26	ANW	TAL SL
Total/NA	Prep	PrecSep_0			536394	11/12/21 10:48	LPS	TAL SL
Total/NA	Analysis	9320		1	539784	12/01/21 14:12	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228 Pos		1	542341	12/15/21 17:43	EMH	TAL SL

Client Sample ID: 110421NOW-2A
Date Collected: 11/04/21 15:10
Date Received: 11/06/21 10:30

Lab Sample ID: 240-159571-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			512106	11/09/21 14:00	SHB	TAL CAN
Total Recoverable	Analysis	6010D		1	512465	11/10/21 21:25	DSH	TAL CAN
Total Recoverable	Prep	3005A			512106	11/09/21 14:00	SHB	TAL CAN
Total Recoverable	Analysis	6020B		1	512444	11/10/21 22:28	AJC	TAL CAN
Total/NA	Analysis	9056A		1	514731	11/27/21 22:54	JWW	TAL CAN
Total/NA	Analysis	SM 2540C		1	378659	11/11/21 17:25	KMM	TAL PIT
Total/NA	Prep	PrecSep-21			536245	11/12/21 09:23	LPS	TAL SL
Total/NA	Analysis	9315		1	540407	12/06/21 13:26	ANW	TAL SL

Lab Chronicle

Client: Dominion Energy Services, Inc.
Project/Site: Mount Storm Power Station

Job ID: 240-159571-1
SDG: Low Volume Waste Settling Ponds (LVWSP) CCR

Client Sample ID: 110421NOW-2A
Date Collected: 11/04/21 15:10
Date Received: 11/06/21 10:30

Lab Sample ID: 240-159571-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep_0			536394	11/12/21 10:48	LPS	TAL SL
Total/NA	Analysis	9320		1	539784	12/01/21 14:12	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228 Pos		1	542341	12/15/21 17:43	EMH	TAL SL

Client Sample ID: 110421NOW-4A
Date Collected: 11/04/21 14:05
Date Received: 11/06/21 10:30

Lab Sample ID: 240-159571-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			512106	11/09/21 14:00	SHB	TAL CAN
Total Recoverable	Analysis	6010D		1	512465	11/10/21 21:29	DSH	TAL CAN
Total Recoverable	Prep	3005A			512106	11/09/21 14:00	SHB	TAL CAN
Total Recoverable	Analysis	6020B		1	512444	11/10/21 22:30	AJC	TAL CAN
Total/NA	Analysis	9056A		1	514731	11/27/21 23:14	JWW	TAL CAN
Total/NA	Analysis	SM 2540C		1	378659	11/11/21 17:25	KMM	TAL PIT
Total/NA	Prep	PrecSep-21			536245	11/12/21 09:23	LPS	TAL SL
Total/NA	Analysis	9315		1	540407	12/06/21 13:26	ANW	TAL SL
Total/NA	Prep	PrecSep_0			536394	11/12/21 10:48	LPS	TAL SL
Total/NA	Analysis	9320		1	539784	12/01/21 14:12	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228 Pos		1	542341	12/15/21 17:43	EMH	TAL SL

Client Sample ID: 110421NOW-10
Date Collected: 11/04/21 12:05
Date Received: 11/06/21 10:30

Lab Sample ID: 240-159571-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			512106	11/09/21 14:00	SHB	TAL CAN
Total Recoverable	Analysis	6010D		1	512465	11/10/21 20:13	DSH	TAL CAN
Total Recoverable	Prep	3005A			512106	11/09/21 14:00	SHB	TAL CAN
Total Recoverable	Analysis	6020B		1	512444	11/10/21 21:48	AJC	TAL CAN
Total/NA	Analysis	9056A		1	514732	11/28/21 05:05	JWW	TAL CAN
Total/NA	Analysis	SM 2540C		1	378659	11/11/21 17:25	KMM	TAL PIT
Total/NA	Prep	PrecSep-21			536245	11/12/21 09:23	LPS	TAL SL
Total/NA	Analysis	9315		1	540407	12/06/21 13:27	ANW	TAL SL
Total/NA	Prep	PrecSep_0			536394	11/12/21 10:48	LPS	TAL SL
Total/NA	Analysis	9320		1	539784	12/01/21 14:13	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228 Pos		1	542341	12/15/21 17:43	EMH	TAL SL

Client Sample ID: 110421NOW-12
Date Collected: 11/04/21 15:40
Date Received: 11/06/21 10:30

Lab Sample ID: 240-159571-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			512106	11/09/21 14:00	SHB	TAL CAN
Total Recoverable	Analysis	6010D		1	512465	11/10/21 21:42	DSH	TAL CAN

Client Sample ID: 110421NOW-12 Lab Sample ID: 240-159571-6

Date Collected: 11/04/21 15:40 **Matrix: Water**
Date Received: 11/06/21 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			512106	11/09/21 14:00	SHB	TAL CAN
Total Recoverable	Analysis	6020B		1	512444	11/10/21 22:32	AJC	TAL CAN
Total/NA	Analysis	9056A		1	514732	11/28/21 06:10	JWW	TAL CAN
Total/NA	Analysis	9056A		5	514732	11/28/21 06:32	JWW	TAL CAN
Total/NA	Analysis	SM 2540C		1	378659	11/11/21 17:25	KMM	TAL PIT
Total/NA	Prep	PrecSep-21			536245	11/12/21 09:23	LPS	TAL SL
Total/NA	Analysis	9315		1	540407	12/06/21 13:27	ANW	TAL SL
Total/NA	Prep	PrecSep_0			536394	11/12/21 10:48	LPS	TAL SL
Total/NA	Analysis	9320		1	539784	12/01/21 14:13	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228 Pos		1	542341	12/15/21 17:43	EMH	TAL SL

Client Sample ID: 110421NOW-13 Lab Sample ID: 240-159571-7

Date Collected: 11/04/21 12:05 **Matrix: Water**
Date Received: 11/06/21 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			512106	11/09/21 14:00	SHB	TAL CAN
Total Recoverable	Analysis	6010D		1	512465	11/10/21 21:46	DSH	TAL CAN
Total Recoverable	Prep	3005A			512106	11/09/21 14:00	SHB	TAL CAN
Total Recoverable	Analysis	6020B		1	512444	11/10/21 22:40	AJC	TAL CAN
Total/NA	Analysis	9056A		1	514732	11/28/21 06:54	JWW	TAL CAN
Total/NA	Analysis	SM 2540C		1	378659	11/11/21 17:25	KMM	TAL PIT
Total/NA	Prep	PrecSep-21			536245	11/12/21 09:23	LPS	TAL SL
Total/NA	Analysis	9315		1	540407	12/06/21 13:27	ANW	TAL SL
Total/NA	Prep	PrecSep_0			536394	11/12/21 10:48	LPS	TAL SL
Total/NA	Analysis	9320		1	539784	12/01/21 14:14	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228 Pos		1	542341	12/15/21 17:43	EMH	TAL SL

Client Sample ID: 110421FBFieldBlank Lab Sample ID: 240-159571-8

Date Collected: 11/04/21 14:10 **Matrix: Water**
Date Received: 11/06/21 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			512106	11/09/21 14:00	SHB	TAL CAN
Total Recoverable	Analysis	6010D		1	512465	11/10/21 21:50	DSH	TAL CAN
Total Recoverable	Prep	3005A			512106	11/09/21 14:00	SHB	TAL CAN
Total Recoverable	Analysis	6020B		1	512444	11/10/21 22:42	AJC	TAL CAN
Total/NA	Analysis	9056A		1	514732	11/28/21 07:15	JWW	TAL CAN
Total/NA	Analysis	SM 2540C		1	378659	11/11/21 17:25	KMM	TAL PIT
Total/NA	Prep	PrecSep-21			536245	11/12/21 09:23	LPS	TAL SL
Total/NA	Analysis	9315		1	540407	12/06/21 13:28	ANW	TAL SL
Total/NA	Prep	PrecSep_0			536394	11/12/21 10:48	LPS	TAL SL
Total/NA	Analysis	9320		1	539784	12/01/21 14:14	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228 Pos		1	542341	12/15/21 17:43	EMH	TAL SL

Lab Chronicle

Client: Dominion Energy Services, Inc.
Project/Site: Mount Storm Power Station

Job ID: 240-159571-1
SDG: Low Volume Waste Settling Ponds (LVWSP) CCR

Client Sample ID: 110421FDDuplicate

Date Collected: 11/04/21 14:20
Date Received: 11/06/21 10:30

Lab Sample ID: 240-159571-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			512106	11/09/21 14:00	SHB	TAL CAN
Total Recoverable	Analysis	6010D		1	512465	11/10/21 21:55	DSH	TAL CAN
Total Recoverable	Prep	3005A			512106	11/09/21 14:00	SHB	TAL CAN
Total Recoverable	Analysis	6020B		1	512444	11/10/21 22:45	AJC	TAL CAN
Total/NA	Analysis	9056A		1	514732	11/28/21 07:37	JWW	TAL CAN
Total/NA	Analysis	SM 2540C		1	378659	11/11/21 17:25	KMM	TAL PIT
Total/NA	Prep	PrecSep-21			536245	11/12/21 09:23	LPS	TAL SL
Total/NA	Analysis	9315		1	540407	12/06/21 13:28	ANW	TAL SL
Total/NA	Prep	PrecSep_0			536394	11/12/21 10:48	LPS	TAL SL
Total/NA	Analysis	9320		1	539784	12/01/21 14:14	FLC	TAL SL
Total/NA	Analysis	Ra226_Ra228 Pos		1	542341	12/15/21 17:43	EMH	TAL SL

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Accreditation/Certification Summary

Client: Dominion Energy Services, Inc. Job ID: 240-159571-1
Project/Site: Mount Storm Power Station SDG: Low Volume Waste Settling Ponds (LVWSP) CCR

Laboratory: Eurofins TestAmerica, Canton

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
West Virginia DEP	State	210	12-31-21

Laboratory: Eurofins TestAmerica, Pittsburgh

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
West Virginia DEP	State	142	11-11-21

Laboratory: Eurofins TestAmerica, St. Louis

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
West Virginia DEP	State	381	10-31-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
Ra226_Ra228 Pos		Water	Radium 226 and 228

Eurofins TestAmerica, Canton
4101 Shuffel Street NW
North Canton, OH 44720
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing America

MSPS-25A2021-LVWSPCCR-D3-1

Client Information	Sampler:	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s):	COC No: 240-87568-30307.1
Client Contact: Rachel Powell	Phone:	E-Mail: roxanne.cisneros@Eurofinset.com	State of Origin: VA	Page: Page 1 of 2
Company: Golder Associates Inc	PWSID:			Job #:

Address: 2108 W Laburnum Ave, Suite 200	Due Date Requested:	
City: Richmond	TAT Requested (days): STANDARD TAT	
State, Zip: VA, 23227	Compliance Project: Δ Yes Δ No	
Phone: (804) 358-7900	PO #: 50153540	
Email: rachel_powell@golder.com	WO #: 2013993621	
Project Name: Mount Storm Power Station	Project #: 24021758	
Site:	SSOW#:	

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

* Level II Data Package *
25A2021 GW LVWSPCCR
FedEx #: 7750 2639 7822/7750 2639 8851

All Samples preserved on ice*

Special Instructions/Note:

Sample Identification 7750 26 49 8575	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226, 9320_Ra228	2540C_Calcd - TDS	6010C, 6020A, 7470A	9056A_28D - Cl, F, SO4	Total Number of containers
Preservation Code:							D	N	D	N	
10 LM 1104 21NOW-7A	11/04/21	1030	G	Water			X	X	X	X	
10 LM 1104 21NOW-8	11/04/21	1050	G	Water			X	X	X	X	
10 LM 1104 21NOW-2A	11/04/21	1510	G	Water			X	X	X	X	
10 LM 1104 21NOW-4A	11/04/21	1405	G	Water			X	X	X	X	
10 LM 1104 21NOW-10	11/04/21	1205	G	Water		X	X	X	X	X	
10 LM 1104 21NOW-12	11/04/21	1540	G	Water			X	X	X	X	
10 LM 1104 21NOW-13	11/04/21	1205	G	Water			X	X	X	X	
10 LM 1104 21FBField Blank	11/04/21	1410	G	Water			X	X	X	X	
10 LM 1104 21FDDuplicate	11/04/21	1420	G	Water			X	X	X	X	
10 LM 1104 21MSMatrixSpike	11/04/21	1205	G	Water			X	X	X	X	
10 LM 1104 21MSDMatrixSpikeDup	11/04/21	1205	G	Water			X	X	X	X	

240-159571 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		11/05/21 @			11-6-21 1030	ETA
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

159571
154565

Eurofins TestAmerica Canton Sample Receipt Form/Narrative **Login # :**
Canton Facility

Client Golder Site Name

Cooler Received on 11-6-21 Opened on 11-8-21

Cooler unpacked by: Jamie Berger

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time Storage Location

TestAmerica Cooler # A Foam Box Client Cooler Box Other

Packing material used: Bubble Wrap Foam Plastic Bag None Other

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-14 (CF +0.1 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
   IR GUN #IR-15 (CF +0.2°C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 4	Yes	No
-Were the seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
-Were tamper/custody seals intact and uncompromised?	Yes	No NA
3. Shippers' packing slip attached to the cooler(s)?	Yes	No
4. Did custody papers accompany the sample(s)?	Yes	No
5. Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7. Did all bottles arrive in good condition (Unbroken)?	Yes	No
8. Could all bottle labels (ID/Date/Time) be reconciled with the COC?	Yes	No
9. For each sample, does the COC specify preservatives (Y/N), # of containers (Y/N), and sample type of grab/comp(Y/N)?		
10. Were correct bottle(s) used for the test(s) indicated?	Yes	No
11. Sufficient quantity received to perform indicated analyses?	Yes	No
12. Are these work share samples and all listed on the COC?	Yes	No
If yes, Questions 13-17 have been checked at the originating laboratory.		
13. Were all preserved sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# **HC157842**
14. Were VOAs on the COC?	Yes	No
15. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	Yes	No NA
16. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #_____	Yes	No
17. Was a LL Hg or Me Hg trip blank present? _____	Yes	No

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

18. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES ☐ additional next page

Samples processed by:

19. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

20. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

VOA Sample Preservation - Date/Time VOAs Frozen: _____

WI-NC-099

Login # : 159571 ~~159565~~

Eurofins TestAmerica Canton Sample Receipt Multiple Cooler Form				
Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
(TA) Client Box Other	(IR-14) IR-15	1.2	1.3	(Wet Ice) Blue Ice Dry Ice Water None
(TA) Client Box Other	(IR-14) IR-15	3.3	3.4	(Wet Ice) Blue Ice Dry Ice Water None
(TA) Client Box Other	(IR-14) IR-15	2.4	2.5	(Wet Ice) Blue Ice Dry Ice Water None
(TA) Client Box Other	(IR-14) IR-15	0.3	0.4	(Wet Ice) Blue Ice Dry Ice Water None
(TA) Client Box Other	(IR-14) IR-15	4.1	4.2	(Wet Ice) Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
TA Client Box Other	IR-14 IR-15			Wet Ice Blue Ice Dry Ice Water None
			☐ See Temperature Excursion Form	

WI-NC-099 Cooler Receipt Form Page 2 – Multiple Coolers

Login Container Summary Report

Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservative Added (mls)	Lot #
110421NOW-7A	240-159571-C-1	Plastic 500ml - with Nitric Acid	<2			
110421NOW-7A	240-159571-D-1	Plastic 1 liter - Nitric Acid	<2			
110421NOW-7A	240-159571-E-1	Plastic 1 liter - Nitric Acid	<2			
110421NOW-8	240-159571-C-2	Plastic 500ml - with Nitric Acid	<2			
110421NOW-8	240-159571-D-2	Plastic 1 liter - Nitric Acid	<2			
110421NOW-8	240-159571-E-2	Plastic 1 liter - Nitric Acid	<2			
110421NOW-2A	240-159571-C-3	Plastic 500ml - with Nitric Acid	<2			
110421NOW-2A	240-159571-D-3	Plastic 1 liter - Nitric Acid	<2			
110421NOW-2A	240-159571-E-3	Plastic 1 liter - Nitric Acid	<2			
110421NOW-4A	240-159571-C-4	Plastic 500ml - with Nitric Acid	<2			
110421NOW-4A	240-159571-D-4	Plastic 1 liter - Nitric Acid	<2			
110421NOW-4A	240-159571-E-4	Plastic 1 liter - Nitric Acid	<2			
110421NOW-10	240-159571-G-5	Plastic 500ml - with Nitric Acid	<2			
110421NOW-10	240-159571-H-5	Plastic 500ml - with Nitric Acid	<2			
110421NOW-10	240-159571-I-5	Plastic 500ml - with Nitric Acid	<2			
110421NOW-10	240-159571-J-5	Plastic 1 liter - Nitric Acid	<2			
110421NOW-10	240-159571-K-5	Plastic 1 liter - Nitric Acid	<2			
110421NOW-10	240-159571-L-5	Plastic 1 liter - Nitric Acid	<2			
110421NOW-10	240-159571-M-5	Plastic 1 liter - Nitric Acid	<2			
110421NOW-10	240-159571-N-5	Plastic 1 liter - Nitric Acid	<2			
110421NOW-10	240-159571-O-5	Plastic 1 liter - Nitric Acid	<2			
110421NOW-12	240-159571-C-6	Plastic 500ml - with Nitric Acid	<2			
110421NOW-12	240-159571-D-6	Plastic 1 liter - Nitric Acid	<2			
110421NOW-12	240-159571-E-6	Plastic 1 liter - Nitric Acid	<2			
110421NOW-13	240-159571-C-7	Plastic 500ml - with Nitric Acid	<2			
110421NOW-13	240-159571-D-7	Plastic 1 liter - Nitric Acid	<2			
110421NOW-13	240-159571-E-7	Plastic 1 liter - Nitric Acid	<2			
110421FBFIELD BLANK	240-159571-C-8	Plastic 500ml - with Nitric Acid	<2			
110421FBFIELD BLANK	240-159571-D-8	Plastic 1 liter - Nitric Acid	<2			
110421FBFIELD BLANK	240-159571-E-8	Plastic 1 liter - Nitric Acid	<2			
21FDDUPLICATE	240-159571-C-9	Plastic 500ml - with Nitric Acid	<2			
21FDDUPLICATE	240-159571-D-9	Plastic 1 liter - Nitric Acid	<2			
21FDDUPLICATE	240-159571-E-9	Plastic 1 liter - Nitric Acid	<2			

Eurofins TestAmerica, Canton
4101 Shuffel Street NW
North Canton, OH 44720
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s):	COC No: 240-145427.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: roxanne.cisneros@Eurofinset.com	State of Origin: West Virginia	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - West Virginia DEP		Job #: 240-159571-1
Address: 13715 Rider Trail North,	Due Date Requested: 11/21/2021			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: Mount Storm Power Station	Project #: 24021758			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226/PrecSep_21 Standard Target List	9320_Ra228/PrecSep_0 Standard Target List	Ra226_228GFPC_P/ Combined Radium-226 and Radium-228	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X				X	
110421NOW-7A (240-159571-1)	11/4/21	10:30 Eastern		Water			X	X	X	2	
110421NOW-8 (240-159571-2)	11/4/21	10:50 Eastern		Water			X	X	X	2	
110421NOW-2A (240-159571-3)	11/4/21	15:10 Eastern		Water			X	X	X	2	
110421NOW-4A (240-159571-4)	11/4/21	14:05 Eastern		Water			X	X	X	2	
110421NOW-10 (240-159571-5)	11/4/21	12:05 Eastern		Water			X	X	X	6	
110421NOW-12 (240-159571-6)	11/4/21	15:40 Eastern		Water			X	X	X	2	
110421NOW-13 (240-159571-7)	11/4/21	12:05 Eastern		Water			X	X	X	2	
110421FBFieldBlank (240-159571-8)	11/4/21	14:10 Eastern		Water			X	X	X	2	
110421FDDuplicate (240-159571-9)	11/4/21	14:20 Eastern		Water			X	X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Brandon	11-9-21 1100	FA	FedEx		
	Relinquished by: FedEx	Date/Time:	Company	Received by: Michael Cunningham	Date/Time: 11/10/2021 09:38	Company: EGA SRL
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

12/15/2021

Eurofins TestAmerica, Canton
4101 Shuffel Street NW
North Canton, OH 44720
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s):	COC No: 240-145427.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: roxanne.cisneros@Eurofinset.com	State of Origin: West Virginia	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - West Virginia DEP		Job #: 240-159571-1
Address: 13715 Rider Trail North,	Due Date Requested: 11/21/2021			
City: Earth City	TAT Requested (days):			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #:			
Email:	WO #:			
Project Name: Mount Storm Power Station	Project #: 24021758			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226/PrecSep_21 Standard Target List	9320_Ra228/PrecSep_0 Standard Target List	Ra226_228GFPC_P/ Combined Radium-226 and Radium-228	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
110421NOW-7A (240-159571-1)	11/4/21	10:30 Eastern		Water			X	X	X	2	
110421NOW-8 (240-159571-2)	11/4/21	10:50 Eastern		Water			X	X	X	2	
110421NOW-2A (240-159571-3)	11/4/21	15:10 Eastern		Water			X	X	X	2	
110421NOW-4A (240-159571-4)	11/4/21	14:05 Eastern		Water			X	X	X	2	
110421NOW-10 (240-159571-5)	11/4/21	12:05 Eastern		Water			X	X	X	6	
110421NOW-12 (240-159571-6)	11/4/21	15:40 Eastern		Water			X	X	X	2	
110421NOW-13 (240-159571-7)	11/4/21	12:05 Eastern		Water			X	X	X	2	
110421FBFieldBlank (240-159571-8)	11/4/21	14:10 Eastern		Water			X	X	X	2	
110421FDDuplicate (240-159571-9)	11/4/21	14:20 Eastern		Water			X	X	X	2	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	11-9-21 1100	FA	FedEx		
Relinquished by: FedEx	Date/Time:	Company	Received by: [signature]	Date/Time: 11/10/2021 09:38	Company: TA SA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

12/15/2021

Eurofins TestAmerica, Canton
4101 Shuffel Street NW
North Canton, OH 44720
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

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240-159571 Chain of Custody

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Cisneros, Roxanne	
Client Contact: Shipping/Receiving	Phone:	E-Mail: roxanne.cisneros@Eurofinset	
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See r: State Program - West Vi	
Address: 301 Alpha Drive, RIDC Park,	Due Date Requested: 11/21/2021		
City: Pittsburgh	TAT Requested (days):		
State, Zip: PA, 15238			
Phone: 412-963-7058(Tel) 412-963-2468(Fax)	PO #:		
Email:	WO #:		
Project Name: Mount Storm Power Station	Project #: 24021758		
Site:	SSOW#:		

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	2540C_Calcd/ TDS	Total Number of containers	Special Instructions/Note:
Preservation Code:									
110421NOW-7A (240-159571-1)	11/4/21	10:30 Eastern		Water			X	1	
110421NOW-8 (240-159571-2)	11/4/21	10:50 Eastern		Water			X	1	
110421NOW-2A (240-159571-3)	11/4/21	15:10 Eastern		Water			X	1	
110421NOW-4A (240-159571-4)	11/4/21	14:05 Eastern		Water			X	1	
110421NOW-10 (240-159571-5)	11/4/21	12:05 Eastern		Water			X	1	
110421NOW-12 (240-159571-6)	11/4/21	15:40 Eastern		Water			X	1	
110421NOW-13 (240-159571-7)	11/4/21	12:05 Eastern		Water			X	1	
110421FBFieldBlank (240-159571-8)	11/4/21	14:10 Eastern		Water			X	1	
110421FDDuplicate (240-159571-9)	11/4/21	14:20 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins TestAmerica.

Possible Hazard Identification: Unconfirmed	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months
Deliverable Requested: I, II, III, IV, Other (specify) — Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	11-9-21 1600	TA		11-11-21 930	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Login Sample Receipt Checklist

Client: Dominion Energy Services, Inc.

Job Number: 240-159571-1
SDG Number: Low Volume Waste Settling Ponds (LVWSP) CCR

Login Number: 159571
List Number: 3
Creator: Watson, Debbie

List Source: Eurofins TestAmerica, Pittsburgh
List Creation: 11/11/21 12:16 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Dominion Energy Services, Inc.

Job Number: 240-159571-1
SDG Number: Low Volume Waste Settling Ponds (LVWSP) CCR

Login Number: 159571
List Number: 2
Creator: Korrinhizer, Micha L

List Source: Eurofins TestAmerica, St. Louis
List Creation: 11/10/21 11:07 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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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:

Mount Storm Power Station Groundwater Sampling
Samples Collected between: 11/2/2021 and 11/5/2021

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:

2401595711

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	Anayte	T/D	Result	Qual	Reason Code(s)	MDL	QL	Uncertainty	Unit
110421NOW-7A	OW-7A	N	CALC	Radium-226/228	N	0.879	U	BL,S			0.449	pCi/L
110421NOW-7A	OW-7A	N	SW-846 9315	Radium-226	N	0.394	U	BL	0.394	1.00	0.173	pCi/L
110421NOW-8	OW-8	N	CALC	Radium-226/228	N	0.0226	U	S			0.509	pCi/L
110421NOW-2A	OW-2A	N	CALC	Radium-226/228	N	0.694	J	S			0.621	pCi/L
110421NOW-2A	OW-2A	N	SW-846 6010D	Boron	T	99	J	RL	57	100		ug/L
110421NOW-2A	OW-2A	N	SW-846 6020B	Arsenic	T	1.7	J	RL	0.75	5.0		ug/L
110421NOW-2A	OW-2A	N	SW-846 6020B	Lead	T	0.94	J	RL	0.45	1.0		ug/L
110421NOW-2A	OW-2A	N	SW-846 6020B	Lithium	T	2.6	J	RL	1.7	8.0		ug/L
110421NOW-2A	OW-2A	N	SW-846 6020B	Molybdenum	T	1.3	J	RL	1.1	5.0		ug/L
110421NOW-2A	OW-2A	N	SW-846 9056A	Fluoride	N	0.036	J	RL	0.024	0.050		mg/L
110421NOW-4A	OW-4A	N	SW-846 6010D	Boron	T	85	J	RL	57	100		ug/L
110421NOW-4A	OW-4A	N	SW-846 6020B	Arsenic	T	1.5	J	RL	0.75	5.0		ug/L
110421NOW-4A	OW-4A	N	SW-846 6020B	Cobalt	T	0.34	J	RL	0.19	1.0		ug/L
110421NOW-4A	OW-4A	N	SW-846 6020B	Lithium	T	1.9	J	RL	1.7	8.0		ug/L
110421NOW-4A	OW-4A	N	SW-846 6020B	Molybdenum	T	1.4	J	RL	1.1	5.0		ug/L
110421NOW-10	OW-10	N	CALC	Radium-226/228	N	0.501	U	BL,S			0.427	pCi/L
110421NOW-10	OW-10	N	SW-846 6010D	Boron	T	97	J	RL	57	100		ug/L
110421NOW-10	OW-10	N	SW-846 6020B	Arsenic	T	1.0	J	RL	0.75	5.0		ug/L
110421NOW-10	OW-10	N	SW-846 6020B	Cobalt	T	0.23	J	RL	0.19	1.0		ug/L
110421NOW-10	OW-10	N	SW-846 6020B	Thallium	T	0.62	J	RL	0.20	1.0		ug/L
110421NOW-10	OW-10	N	SW-846 9315	Radium-226	N	0.209	U	BL	0.209	1.00	0.136	pCi/L
110421NOW-12	OW-12	N	CALC	Radium-226/228	N	0.637	U	BL,S			0.420	pCi/L
110421NOW-12	OW-12	N	SW-846 6020B	Arsenic	T	2.4	J	RL	0.75	5.0		ug/L
110421NOW-12	OW-12	N	SW-846 6020B	Lithium	T	2.4	J	RL	1.7	8.0		ug/L
110421NOW-12	OW-12	N	SW-846 6020B	Molybdenum	T	3.3	J	RL	1.1	5.0		ug/L
110421NOW-12	OW-12	N	SW-846 9315	Radium-226	N	0.311	U	BL	0.311	1.00	0.182	pCi/L
110421NOW-13	OW-13	N	CALC	Radium-226/228	N	1.19	U	BL,S			0.759	pCi/L
110421NOW-13	OW-13	N	SW-846 6010D	Boron	T	65	J	RL	57	100		ug/L
110421NOW-13	OW-13	N	SW-846 6020B	Lead	T	0.56	J	RL	0.45	1.0		ug/L
110421NOW-13	OW-13	N	SW-846 6020B	Selenium	T	1.2	J	RL	0.89	5.0		ug/L

Sample	Location	Sample Type	Method	Anayte	T/D	Result	Qual	Reason Code(s)	MDL	QL	Uncertainty	Unit
110421NOW-13	OW-13	N	SW-846 9056A	Fluoride	N	0.044	J	RL	0.024	0.050		mg/L
110421NOW-13	OW-13	N	SW-846 9315	Radium-226	N	0.501	U	BL	0.501	1.00	0.258	pCi/L
110421FBFIELDBLANK		FB	CALC	Radium-226/228	N	0.0662	U	S			0.238	pCi/L
110421FDDUPLICATE	OW-4A	FD	CALC	Radium-226/228	N	0.502	U	BL,S			0.427	pCi/L
110421FDDUPLICATE	OW-4A	FD	SW-846 6010D	Boron	T	82	J	RL	57	100		ug/L
110421FDDUPLICATE	OW-4A	FD	SW-846 6020B	Arsenic	T	1.6	J	RL	0.75	5.0		ug/L
110421FDDUPLICATE	OW-4A	FD	SW-846 6020B	Cobalt	T	0.34	J	RL	0.19	1.0		ug/L
110421FDDUPLICATE	OW-4A	FD	SW-846 6020B	Lithium	T	2.3	J	RL	1.7	8.0		ug/L
110421FDDUPLICATE	OW-4A	FD	SW-846 6020B	Molybdenum	T	1.5	J	RL	1.1	5.0		ug/L
110421FDDUPLICATE	OW-4A	FD	SW-846 9315	Radium-226	N	0.262	U	BL	0.262	1.00	0.158	pCi/L

Data Qualifiers	
U	The analyte was not detected above the level of the reported sample quantitation 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	This analyte was not detected, but the reporting limit may or may not be higher due to a bias identified during data validation.
R	Unreliable positive result; analyte may or may not be present in sample.
Reason Codes and Explanations	
BE	Equipment blank contamination. The result should be considered “not-detected.”
BF	Field blank contamination. The result should be considered “not-detected.”
BL	Laboratory blank contamination. The result should be considered “not-detected.”
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 RL.
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: Mt. Storm Power Station
SDG: 2401595711

Lab Sample ID	240-159571-1
Sys Sample Code	110421NOW-7A
Sample Name	110421NOW-7A
Sample Date	11/4/2021 10:30:00 AM
Location	MSPS-LVWSP-OW-07A / OW-7A
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	Radium-226/228	RA226/228	N	pCi/L	0.879	U	BL,S	0.449				N	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	270				10	10	10	Y	Yes	1	NA
SW-846 6010D	Boron	7440-42-8	T	ug/L		U			57	57	100	N	Yes	1	NA
SW-846 6020B	Arsenic	7440-38-2	T	ug/L		U			0.75	0.75	5.0	N	Yes	1	NA
	Barium	7440-39-3	T	ug/L	280				2.2	2.2	5.0	Y	Yes	1	NA
	Beryllium	7440-41-7	T	ug/L		U			0.62	0.62	1.0	N	Yes	1	NA
	Cadmium	7440-43-9	T	ug/L		U			0.20	0.20	1.0	N	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	43000				580	580	1000	Y	Yes	1	NA
	Chromium	7440-47-3	T	ug/L		U			2.5	2.5	5.0	N	Yes	1	NA
	Cobalt	7440-48-4	T	ug/L	3.6				0.19	0.19	1.0	Y	Yes	1	NA
	Lead	7439-92-1	T	ug/L		U			0.45	0.45	1.0	N	Yes	1	NA
	Lithium	7439-93-2	T	ug/L	14				1.7	1.7	8.0	Y	Yes	1	NA
	Molybdenum	7439-98-7	T	ug/L		U			1.1	1.1	5.0	N	Yes	1	NA
	Selenium	7782-49-2	T	ug/L		U			0.89	0.89	5.0	N	Yes	1	NA
	Thallium	7440-28-0	T	ug/L		U			0.20	0.20	1.0	N	Yes	1	NA
SW-846 9056A	Chloride	16887-00-6	N	mg/L	95				0.28	0.28	1.0	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L	0.11				0.024	0.024	0.050	Y	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	9.6				0.35	0.35	1.0	Y	Yes	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	0.394	U	BL	0.173	0.394	0.394	1.00	N	Yes	1	NA
SW-846 9320	Radium-228	15262-20-1	N	pCi/L	0.485	U		0.414	0.657	0.657	1.00	N	Yes	1	NA

Lab Sample ID	240-159571-2
Sys Sample Code	110421NOW-8
Sample Name	110421NOW-8
Sample Date	11/4/2021 10:50:00 AM
Location	MSPS-LVWSP-OW-08 / OW-8
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	Radium-226/228	RA226/228	N	pCi/L	0.0226	U	S	0.509				N	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	1500				10	10	10	Y	Yes	1	NA
SW-846 6010D	Boron	7440-42-8	T	ug/L	100				57	57	100	Y	Yes	1	NA
SW-846 6020B	Arsenic	7440-38-2	T	ug/L		U			0.75	0.75	5.0	N	Yes	1	NA
	Barium	7440-39-3	T	ug/L	11				2.2	2.2	5.0	Y	Yes	1	NA
	Beryllium	7440-41-7	T	ug/L		U			0.62	0.62	1.0	N	Yes	1	NA
	Cadmium	7440-43-9	T	ug/L		U			0.20	0.20	1.0	N	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	310000				580	580	1000	Y	Yes	1	NA
	Chromium	7440-47-3	T	ug/L		U			2.5	2.5	5.0	N	Yes	1	NA
	Cobalt	7440-48-4	T	ug/L	25				0.19	0.19	1.0	Y	Yes	1	NA
	Lead	7439-92-1	T	ug/L		U			0.45	0.45	1.0	N	Yes	1	NA
	Lithium	7439-93-2	T	ug/L	8.7				1.7	1.7	8.0	Y	Yes	1	NA
	Molybdenum	7439-98-7	T	ug/L		U			1.1	1.1	5.0	N	Yes	1	NA
	Selenium	7782-49-2	T	ug/L		U			0.89	0.89	5.0	N	Yes	1	NA
	Thallium	7440-28-0	T	ug/L		U			0.20	0.20	1.0	N	Yes	1	NA
SW-846 9056A	Chloride	16887-00-6	N	mg/L	190				0.28	0.28	1.0	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L	0.050				0.024	0.024	0.050	Y	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	690				1.7	1.7	5.0	Y	Yes	5	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	0.0226	U		0.135	0.257	0.257	1.00	N	Yes	1	NA
SW-846 9320	Radium-228	15262-20-1	N	pCi/L	-0.0594	U		0.491	0.879	0.879	1.00	N	Yes	1	NA

Facility: Mt. Storm Power Station
SDG: 2401595711

Lab Sample ID	240-159571-3
Sys Sample Code	110421NOW-2A
Sample Name	110421NOW-2A
Sample Date	11/4/2021 3:10:00 PM
Location	MSPS-LVWSP-OW-02A / OW-2A
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	Radium-226/228	RA226/228	N	pCi/L	0.694	J	S	0.621				Y	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	350				10	10	10	Y	Yes	1	NA
SW-846 6010D	Boron	7440-42-8	T	ug/L	99	J	RL		57	57	100	Y	Yes	1	NA
SW-846 6020B	Arsenic	7440-38-2	T	ug/L	1.7	J	RL		0.75	0.75	5.0	Y	Yes	1	NA
	Barium	7440-39-3	T	ug/L	200				2.2	2.2	5.0	Y	Yes	1	NA
	Beryllium	7440-41-7	T	ug/L		U			0.62	0.62	1.0	N	Yes	1	NA
	Cadmium	7440-43-9	T	ug/L	3.9				0.20	0.20	1.0	Y	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	59000				580	580	1000	Y	Yes	1	NA
	Chromium	7440-47-3	T	ug/L		U			2.5	2.5	5.0	N	Yes	1	NA
	Cobalt	7440-48-4	T	ug/L	180				0.19	0.19	1.0	Y	Yes	1	NA
	Lead	7439-92-1	T	ug/L	0.94	J	RL		0.45	0.45	1.0	Y	Yes	1	NA
	Lithium	7439-93-2	T	ug/L	2.6	J	RL		1.7	1.7	8.0	Y	Yes	1	NA
	Molybdenum	7439-98-7	T	ug/L	1.3	J	RL		1.1	1.1	5.0	Y	Yes	1	NA
	Selenium	7782-49-2	T	ug/L		U			0.89	0.89	5.0	N	Yes	1	NA
	Thallium	7440-28-0	T	ug/L		U			0.20	0.20	1.0	N	Yes	1	NA
SW-846 9056A	Chloride	16887-00-6	N	mg/L	49				0.28	0.28	1.0	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L	0.036	J	RL		0.024	0.024	0.050	Y	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	80				0.35	0.35	1.0	Y	Yes	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	0.694			0.269	0.300	0.300	1.00	Y	Yes	1	NA
SW-846 9320	Radium-228	15262-20-1	N	pCi/L	-0.111	U		0.560	1.02	1.02	1.02	N	Yes	1	NA

Facility: Mt. Storm Power Station
SDG: 2401595711

Lab Sample ID	240-159571-4
Sys Sample Code	110421NOW-4A
Sample Name	110421NOW-4A
Sample Date	11/4/2021 2:05:00 PM
Location	MSPS-LVWSP-OW-04A / OW-4A
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	Radium-226/228	RA226/228	N	pCi/L	0.424	U		0.423				N	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	110				10	10	10	Y	Yes	1	NA
SW-846 6010D	Boron	7440-42-8	T	ug/L	85	J	RL		57	57	100	Y	Yes	1	NA
SW-846 6020B	Arsenic	7440-38-2	T	ug/L	1.5	J	RL		0.75	0.75	5.0	Y	Yes	1	NA
	Barium	7440-39-3	T	ug/L	79				2.2	2.2	5.0	Y	Yes	1	NA
	Beryllium	7440-41-7	T	ug/L		U			0.62	0.62	1.0	N	Yes	1	NA
	Cadmium	7440-43-9	T	ug/L		U			0.20	0.20	1.0	N	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	24000				580	580	1000	Y	Yes	1	NA
	Chromium	7440-47-3	T	ug/L		U			2.5	2.5	5.0	N	Yes	1	NA
	Cobalt	7440-48-4	T	ug/L	0.34	J	RL		0.19	0.19	1.0	Y	Yes	1	NA
	Lead	7439-92-1	T	ug/L		U			0.45	0.45	1.0	N	Yes	1	NA
	Lithium	7439-93-2	T	ug/L	1.9	J	RL		1.7	1.7	8.0	Y	Yes	1	NA
	Molybdenum	7439-98-7	T	ug/L	1.4	J	RL		1.1	1.1	5.0	Y	Yes	1	NA
	Selenium	7782-49-2	T	ug/L		U			0.89	0.89	5.0	N	Yes	1	NA
	Thallium	7440-28-0	T	ug/L		U			0.20	0.20	1.0	N	Yes	1	NA
SW-846 9056A	Chloride	16887-00-6	N	mg/L	4.8				0.28	0.28	1.0	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L	0.074				0.024	0.024	0.050	Y	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	42				0.35	0.35	1.0	Y	Yes	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	0.149	U		0.146	0.229	0.229	1.00	N	Yes	1	NA
SW-846 9320	Radium-228	15262-20-1	N	pCi/L	0.275	U		0.397	0.665	0.665	1.00	N	Yes	1	NA

Facility: Mt. Storm Power Station
SDG: 2401595711

Lab Sample ID	240-159571-5
Sys Sample Code	110421NOW-10
Sample Name	110421NOW-10
Sample Date	11/4/2021 12:05:00 PM
Location	MSPS-LVWSP-OW-10 / OW-10
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	Radium-226/228	RA226/228	N	pCi/L	0.501	U	BL,S	0.427				N	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	200				10	10	10	Y	Yes	1	NA
SW-846 6010D	Boron	7440-42-8	T	ug/L	97	J	RL		57	57	100	Y	Yes	1	NA
SW-846 6020B	Arsenic	7440-38-2	T	ug/L	1.0	J	RL		0.75	0.75	5.0	Y	Yes	1	NA
	Barium	7440-39-3	T	ug/L	280				2.2	2.2	5.0	Y	Yes	1	NA
	Beryllium	7440-41-7	T	ug/L		U			0.62	0.62	1.0	N	Yes	1	NA
	Cadmium	7440-43-9	T	ug/L		U			0.20	0.20	1.0	N	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	39000				580	580	1000	Y	Yes	1	NA
	Chromium	7440-47-3	T	ug/L		U			2.5	2.5	5.0	N	Yes	1	NA
	Cobalt	7440-48-4	T	ug/L	0.23	J	RL		0.19	0.19	1.0	Y	Yes	1	NA
	Lead	7439-92-1	T	ug/L		U			0.45	0.45	1.0	N	Yes	1	NA
	Lithium	7439-93-2	T	ug/L	8.8				1.7	1.7	8.0	Y	Yes	1	NA
	Molybdenum	7439-98-7	T	ug/L		U			1.1	1.1	5.0	N	Yes	1	NA
	Selenium	7782-49-2	T	ug/L		U			0.89	0.89	5.0	N	Yes	1	NA
	Thallium	7440-28-0	T	ug/L	0.62	J	RL		0.20	0.20	1.0	Y	Yes	1	NA
SW-846 9056A	Chloride	16887-00-6	N	mg/L	6.7				0.28	0.28	1.0	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L	0.21				0.024	0.024	0.050	Y	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L		U			0.35	0.35	1.0	N	Yes	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	0.209	U	BL	0.136	0.209	0.209	1.00	N	Yes	1	NA
SW-846 9320	Radium-228	15262-20-1	N	pCi/L	0.291	U		0.405	0.674	0.674	1.00	N	Yes	1	NA

Lab Sample ID	240-159571-6
Sys Sample Code	110421NOW-12
Sample Name	110421NOW-12
Sample Date	11/4/2021 3:40:00 PM
Location	MSPS-LVWSP-OW-12 / OW-12
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	Radium-226/228	RA226/228	N	pCi/L	0.637	U	BL,S	0.420				N	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	610				10	10	10	Y	Yes	1	NA
SW-846 6010D	Boron	7440-42-8	T	ug/L	260				57	57	100	Y	Yes	1	NA
SW-846 6020B	Arsenic	7440-38-2	T	ug/L	2.4	J	RL		0.75	0.75	5.0	Y	Yes	1	NA
	Barium	7440-39-3	T	ug/L	59				2.2	2.2	5.0	Y	Yes	1	NA
	Beryllium	7440-41-7	T	ug/L		U			0.62	0.62	1.0	N	Yes	1	NA
	Cadmium	7440-43-9	T	ug/L		U			0.20	0.20	1.0	N	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	88000				580	580	1000	Y	Yes	1	NA
	Chromium	7440-47-3	T	ug/L		U			2.5	2.5	5.0	N	Yes	1	NA
	Cobalt	7440-48-4	T	ug/L	49				0.19	0.19	1.0	Y	Yes	1	NA
	Lead	7439-92-1	T	ug/L		U			0.45	0.45	1.0	N	Yes	1	NA
	Lithium	7439-93-2	T	ug/L	2.4	J	RL		1.7	1.7	8.0	Y	Yes	1	NA
	Molybdenum	7439-98-7	T	ug/L	3.3	J	RL		1.1	1.1	5.0	Y	Yes	1	NA
	Selenium	7782-49-2	T	ug/L		U			0.89	0.89	5.0	N	Yes	1	NA
	Thallium	7440-28-0	T	ug/L		U			0.20	0.20	1.0	N	Yes	1	NA
SW-846 9056A	Chloride	16887-00-6	N	mg/L	110				0.28	0.28	1.0	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L	0.056				0.024	0.024	0.050	Y	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	240				1.7	1.7	5.0	Y	Yes	5	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	0.311	U	BL	0.182	0.311	0.311	1.00	N	Yes	1	NA
SW-846 9320	Radium-228	15262-20-1	N	pCi/L	0.325	U		0.379	0.622	0.622	1.00	N	Yes	1	NA

Facility: Mt. Storm Power Station
SDG: 2401595711

Lab Sample ID	240-159571-7
Sys Sample Code	110421NOW-13
Sample Name	110421NOW-13
Sample Date	11/4/2021 12:05:00 PM
Location	MSPS-LVWSP-OW-13 / OW-13
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	Radium-226/228	RA226/228	N	pCi/L	1.19	U	BL,S	0.759				N	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	380				10	10	10	Y	Yes	1	NA
SW-846 6010D	Boron	7440-42-8	T	ug/L	65	J	RL		57	57	100	Y	Yes	1	NA
SW-846 6020B	Arsenic	7440-38-2	T	ug/L	8.0				0.75	0.75	5.0	Y	Yes	1	NA
	Barium	7440-39-3	T	ug/L	170				2.2	2.2	5.0	Y	Yes	1	NA
	Beryllium	7440-41-7	T	ug/L		U			0.62	0.62	1.0	N	Yes	1	NA
	Cadmium	7440-43-9	T	ug/L		U			0.20	0.20	1.0	N	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	20000				580	580	1000	Y	Yes	1	NA
	Chromium	7440-47-3	T	ug/L	5.5				2.5	2.5	5.0	Y	Yes	1	NA
	Cobalt	7440-48-4	T	ug/L	4.1				0.19	0.19	1.0	Y	Yes	1	NA
	Lead	7439-92-1	T	ug/L	0.56	J	RL		0.45	0.45	1.0	Y	Yes	1	NA
	Lithium	7439-93-2	T	ug/L		U			1.7	1.7	8.0	N	Yes	1	NA
	Molybdenum	7439-98-7	T	ug/L		U			1.1	1.1	5.0	N	Yes	1	NA
	Selenium	7782-49-2	T	ug/L	1.2	J	RL		0.89	0.89	5.0	Y	Yes	1	NA
	Thallium	7440-28-0	T	ug/L		U			0.20	0.20	1.0	N	Yes	1	NA
SW-846 9056A	Chloride	16887-00-6	N	mg/L	23				0.28	0.28	1.0	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L	0.044	J	RL		0.024	0.024	0.050	Y	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L		U			0.35	0.35	1.0	N	Yes	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	0.501	U	BL	0.258	0.501	0.501	1.00	N	Yes	1	NA
SW-846 9320	Radium-228	15262-20-1	N	pCi/L	0.689	U		0.714	1.16	1.16	1.16	N	Yes	1	NA

Lab Sample ID	240-159571-8
Sys Sample Code	110421FBFIELDBLANK
Sample Name	110421FBFieldBlank
Sample Date	11/4/2021 2:10:00 PM
Location	/
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	Radium-226/228	RA226/228	N	pCi/L	0.0662	U	S	0.238				N	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L		U			10	10	10	N	Yes	1	NA
SW-846 6010D	Boron	7440-42-8	T	ug/L		U			57	57	100	N	Yes	1	NA
SW-846 6020B	Arsenic	7440-38-2	T	ug/L		U			0.75	0.75	5.0	N	Yes	1	NA
	Barium	7440-39-3	T	ug/L		U			2.2	2.2	5.0	N	Yes	1	NA
	Beryllium	7440-41-7	T	ug/L		U			0.62	0.62	1.0	N	Yes	1	NA
	Cadmium	7440-43-9	T	ug/L		U			0.20	0.20	1.0	N	Yes	1	NA
	Calcium	7440-70-2	T	ug/L		U			580	580	1000	N	Yes	1	NA
	Chromium	7440-47-3	T	ug/L		U			2.5	2.5	5.0	N	Yes	1	NA
	Cobalt	7440-48-4	T	ug/L		U			0.19	0.19	1.0	N	Yes	1	NA
	Lead	7439-92-1	T	ug/L		U			0.45	0.45	1.0	N	Yes	1	NA
	Lithium	7439-93-2	T	ug/L		U			1.7	1.7	8.0	N	Yes	1	NA
	Molybdenum	7439-98-7	T	ug/L		U			1.1	1.1	5.0	N	Yes	1	NA
	Selenium	7782-49-2	T	ug/L		U			0.89	0.89	5.0	N	Yes	1	NA
	Thallium	7440-28-0	T	ug/L		U			0.20	0.20	1.0	N	Yes	1	NA
SW-846 9056A	Chloride	16887-00-6	N	mg/L		U			0.28	0.28	1.0	N	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L		U			0.024	0.024	0.050	N	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L		U			0.35	0.35	1.0	N	Yes	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	0.0662	U		0.0983	0.167	0.167	1.00	N	Yes	1	NA
SW-846 9320	Radium-228	15262-20-1	N	pCi/L	-0.136	U		0.217	0.424	0.424	1.00	N	Yes	1	NA

Facility: Mt. Storm Power Station
SDG: 2401595711

Lab Sample ID	240-159571-9
Sys Sample Code	110421FDDUPLICATE
Sample Name	110421FDDuplicate
Sample Date	11/4/2021 2:20:00 PM
Location	MSPS-LVWSP-OW-04A / OW-4A
Sample Type	FD
Matrix	GW
Parent Sample	110421NOW-4A

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	Radium-226/228	RA226/228	N	pCi/L	0.502	U	BL,S	0.427				N	Yes	1	NA
SM 2540C	Total Dissolved Solids	TDS	N	mg/L	110				10	10	10	Y	Yes	1	NA
SW-846 6010D	Boron	7440-42-8	T	ug/L	82	J	RL		57	57	100	Y	Yes	1	NA
SW-846 6020B	Arsenic	7440-38-2	T	ug/L	1.6	J	RL		0.75	0.75	5.0	Y	Yes	1	NA
	Barium	7440-39-3	T	ug/L	74				2.2	2.2	5.0	Y	Yes	1	NA
	Beryllium	7440-41-7	T	ug/L		U			0.62	0.62	1.0	N	Yes	1	NA
	Cadmium	7440-43-9	T	ug/L		U			0.20	0.20	1.0	N	Yes	1	NA
	Calcium	7440-70-2	T	ug/L	24000				580	580	1000	Y	Yes	1	NA
	Chromium	7440-47-3	T	ug/L		U			2.5	2.5	5.0	N	Yes	1	NA
	Cobalt	7440-48-4	T	ug/L	0.34	J	RL		0.19	0.19	1.0	Y	Yes	1	NA
	Lead	7439-92-1	T	ug/L		U			0.45	0.45	1.0	N	Yes	1	NA
	Lithium	7439-93-2	T	ug/L	2.3	J	RL		1.7	1.7	8.0	Y	Yes	1	NA
	Molybdenum	7439-98-7	T	ug/L	1.5	J	RL		1.1	1.1	5.0	Y	Yes	1	NA
	Selenium	7782-49-2	T	ug/L		U			0.89	0.89	5.0	N	Yes	1	NA
	Thallium	7440-28-0	T	ug/L		U			0.20	0.20	1.0	N	Yes	1	NA
SW-846 9056A	Chloride	16887-00-6	N	mg/L	5.1				0.28	0.28	1.0	Y	Yes	1	NA
	Fluoride	16984-48-8	N	mg/L	0.10				0.024	0.024	0.050	Y	Yes	1	NA
	Sulfate	14808-79-8	N	mg/L	46				0.35	0.35	1.0	Y	Yes	1	NA
SW-846 9315	Radium-226	13982-63-3	N	pCi/L	0.262	U	BL	0.158	0.262	0.262	1.00	N	Yes	1	NA
SW-846 9320	Radium-228	15262-20-1	N	pCi/L	0.240	U		0.397	0.670	0.670	1.00	N	Yes	1	NA

APPENDIX C

2020 SECOND SEMI-ANNUAL ASSESSMENT MONITORING PROGRAM EVENT STATISTICAL WORKSHEETS

Attachment 2
Groundwater Protection Standard Comparison
Confidence Limit Method

Date: February 25, 2021

Site Owner: Dominion Energy

Site: Mt. Storm - LVWSP

Monitoring Well: OW-2A

Constituent: Cobalt

Sample Number	Sample Date	Result (ug/L)	Notes
1	11/3/2015	13.3	Detection
2	2/2/2016	2.0	Non-Detect
3	5/4/2016	2.9	Detection
4	8/24/2016	104	Detection
5	10/11/2016	4.5	Detection
6	11/30/2016	11.7	Detection
7	2/14/2017	5.1	Detection
8	5/17/2017	7.3	Detection
9	8/16/2017	7.1	Detection
10	3/19/2018	4.2	Detection
11	6/5/2018	6.8	Detection
12	1/2/2019	13.3	Detection (Verification)
13	4/17/2019	5.2	Detection
14	10/30/2019	99	Detection
15	4/15/2020	20	Detection
16	10/14/2020	72	Detection

Sample Group Mean (X):	23.65
Sample Group Standard Deviation (S):	34.64
Confidence Level:	95%
Sample Group Count:	16
Degrees of Freedom (n-1):	15
Critical Value (tc):	1.753
Lower Confidence Limit (ug/L):	8.470
Upper Confidence Limit (ug/L):	38.830
Groundwater Protection Standard (ug/L):	34
GPS Exceedance Confirmed?:	NO

Note: GPS exceedance indicated if Lower Confidence Limit exceeds the GPS.

Attachment 2
Groundwater Protection Standard Comparison
Confidence Limit Method

Date: February 25, 2021

Site Owner: Dominion Energy

Site: Mt. Storm - LVWSP

Monitoring Well: OW-12

Constituent: Cobalt

Sample Number	Sample Date	Result (ug/L)	Notes
1	11/29/2016	8.8	Detection
2	1/18/2017	7.9	Detection
3	2/16/2017	12.8	Detection
4	3/23/2017	10	Detection
5	4/19/2017	6.5	Detection
6	5/16/2017	9.1	Detection
7	6/19/2017	16.8	Detection
8	8/17/2017	11.3	Detection
9	3/20/2018	22.8	Detection
10	6/5/2018	5.3	Detection
11	10/31/2018	10.3	Detection
12	4/17/2019	27	Detection
13	10/30/2019	27	Detection
14	4/15/2020	54	Detection
15	10/14/2020	39	Detection

Sample Group Mean (X):	17.91
Sample Group Standard Deviation (S):	13.83
Confidence Level:	95%
Sample Group Count:	15
Degrees of Freedom (n-1):	14
Critical Value (tc):	1.761
Lower Confidence Limit (ug/L):	11.618
Upper Confidence Limit (ug/L):	24.195
Groundwater Protection Standard (ug/L):	34
GPS Exceedance Confirmed?:	NO

Note: GPS exceedance indicated if Lower Confidence Limit exceeds the GPS.

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