2025 Annual Groundwater Monitoring and Corrective Action Report

Gavin Residual Waste Landfill and Fly Ash Reservoir

PREPARED FOR
Gavin Power, LLC

DATE
31 January 2026

REFERENCE
0767401

SIGNATURE PAGE

2025 Annual Groundwater Monitoring and Corrective Action Report

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ACRONYMS AND ABBREVIATIONS

Acronym	Description
ASD	Alternate Source Demonstration
CCR	Coal Combustion Residual
CFR	Code of Federal Regulations
ERM	Environmental Resources Management, Inc.
FAR	Fly Ash Reservoir
Gavin	Gavin Power, LLC
GWI	Groundwater intercept
H1	First half of year
H2	Second half of year
K	Hydraulic conductivity
Plant	General James M. Gavin Power Plant
RWL	Residual Waste Landfill
SSI	Statistically significant increase
USEPA	United States Environmental Protection Agency

EXECUTIVE SUMMARY

On behalf of Gavin Power, LLC (Gavin), Environmental Resources Management, Inc. (ERM) has prepared this 2025 Annual Groundwater Monitoring and Corrective Action Report summarizing groundwater monitoring activities at the Residual Waste Landfill (RWL) and Fly Ash Reservoir (FAR) at the General James M. Gavin Power Plant (Plant) located in Cheshire, Ohio. The RWL and FAR are coal combustion residual (CCR) units at the Plant that are subject to regulation under Title 40, Code of Federal Regulations (CFR), Part 257, Subpart D (40 CFR § 257.50 et seq.), also known as the CCR Rule. In 2021, ERM certified an updated combined monitoring well network for the RWL and FAR, as allowed by 40 CFR 257.91 and as documented in the Updated Groundwater Monitoring System Evaluation and Certification—40 CFR 257.91 (ERM 2021a). Previously, Gavin maintained and monitored two separate (though adjacent) monitoring networks for the RWL and FAR.

This report documents the status of the groundwater monitoring program for the RWL and FAR, which includes the following as required by 40 CFR § 257.90(e):

- A description of the current program status.
- A summary of key actions completed.
- A description of problems encountered, and actions taken to resolve the problems.
- Identification of key activities for the coming year.

The combined RWL and FAR CCR unit groundwater monitoring program began calendar year 2025 in "detection monitoring" program status as defined by 40 CFR § 257.94 and remains in detection monitoring at the end of the 2025 reporting period. Groundwater monitoring in 2025 consisted of two semi-annual monitoring events completed in the spring and fall of 2025, which included groundwater potentiometric elevation measurements and subsequent groundwater sampling. Groundwater potentiometric elevation measurements were used to construct updated groundwater potentiometric surface maps for each of the geologic units monitored.

Groundwater samples were collected for laboratory analysis of CCR Rule Appendix III constituents, and the results were compared to previously calculated upgradient well prediction limits to identify statistically significant increases (SSIs) for downgradient wells. No wells screened in the alluvium or the Morgantown Sandstone exhibited SSIs (Table ES-1). One downgradient monitoring well screened in the Cow Run Sandstone, 9631, exhibited SSIs of certain Appendix III analytes in 2025 (Table ES-2).

TABLE ES-1: 2025 - NO SSIS IN MORGANTOWN SANDSTONE AND ALLUVIUM DOWNGRADIENT MONITORING WELLS

Well	Date Sampled	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS
96157	Mar-2025	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ
	Sept-2025	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ
94137	Mar-2025	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ
	Dec-2025[1]	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ
9802	Mar-2025	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ
	Set-2025	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ
2016-05	Mar-2025	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ
	Sept-2025	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ
2000	Mar-2025	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ
	Sept-2025	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ
2018-02	Mar-2025	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ
	Sept-2025	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ
2018-04	Mar-2025	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ
	Sept-2025	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ
93108	Mar-2025	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ
	Sept-2025	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ
9806	Mar-2025	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ
	Sept-2025	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ

Notes: ϕ = No SSI; SSI = statistically significant increase; TDS = total dissolved solids; NS = not sampled
[1] = Well sample delayed due to pump electrical issue. Pump was replaced and

TABLE ES-2: 2025 SSIS IN COW RUN SANDSTONE DOWNGRADIENT MONITORING WELLS

Well	Date Sampled	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS
2016-06	Mar-2025	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ
	Sept-2025	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ
2018-01[1]	Mar-2025	NS	NS	NS	NS	NS	NS	NS
	Sept-2025	NS	NS	NS	NS	NS	NS	NS
2018-03	Mar-2025	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ
	Sept-2025	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ
94136	Mar-2025	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ
	Sept-2025	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ
9631	Mar-2025	ϕ	X	X	ϕ	ϕ	ϕ	X
	Sept-2025	ϕ	X	X	ϕ	ϕ	ϕ	X

Notes: ϕ = no SSI; X = SSI; SSI = statistically significant increase; NS = not sampled, TDS = total dissolved solids

[1] Well 2018-01 was abandoned in 2022. A replacement monitoring well is currently being evaluated.

Each identified SSI was evaluated in one of the two attached Alternate Source Demonstration (ASD) Reports. The ASD reports identify regional background as the source of the SSIs for calcium, chloride, and total dissolved solids [TDS] from monitoring well 9631; therefore, the RWL/FAR groundwater monitoring system remained in detection monitoring at the conclusion of 2025. Accordingly, no remedial actions were selected, initiated, or performed in 2025.

Some of the topics discussed in this report are also addressed in USEPA's November 22, 2022 Final Decision: Denial of Alternative Closure Deadline for General James M. Gavin Plant, Cheshire, Ohio (Final Denial). In other documents, Gavin has explained how the approaches described and documented in this report are consistent with USEPA regulations and guidance as well as with best engineering practices and judgment. Gavin has contested USEPA's findings in the Final Denial from a factual, technical and legal perspective.

1. INTRODUCTION

The General James M. Gavin Plant is located in southeast Ohio along the western bank of the Ohio River (Figure 1-1) near Cheshire, Ohio. The Plant contains three regulated CCR units that are subject to regulation under Title 40, Code of Federal Regulations, Part 257, Subpart D (40 CFR 257.50 et seq.), also known as the CCR Rule: the RWL, the FAR, and the Bottom Ash Pond. An updated combined groundwater monitoring system was certified in August 2021 to monitor for potential releases from the RWL and FAR. Previously, Gavin maintained and monitored two separate (though adjacent) groundwater monitoring networks for the RWL and FAR, respectively, but certified the combined monitoring network on 31 August 2021 with completion of the Updated Groundwater Monitoring System Evaluation and Certification—40 CFR 257.91 (ERM 2021a). The Bottom Ash Pond has a separate monitoring system (ERM 2021b) and is not addressed in this report.

This report was produced by ERM on behalf of Gavin Power, LLC and documents the status of the groundwater monitoring program for the RWL/FAR network, including the following as required by 40 CFR § 257.90(e):

- A description of the current program status.
- A summary of key actions completed.
- A description of problems encountered, and actions taken to resolve the problems.
- Identification of key activities for the coming year.

Consistent with the reporting and notification requirements of the CCR Rule, this annual groundwater monitoring report will be posted to the Plant operating record no later than 31 January 2026 (40 CFR § 257.105(h)(1)). Within 30 days of placing the report in the operating record, notification will be made to the Ohio Environmental Protection Agency and the report will be placed on the Plant's publicly accessible internet site (40 CFR §§ 257.106(h)(1), 257.107(h)(1)). Table 1-1 cross-references the reporting requirements under the CCR Rule with the contents of this report.

TABLE 1-1: REGULATORY REQUIREMENT CROSS-REFERENCE TABLE

Regulatory Citation in 40 CFR Part 257, Subpart D	Requirement (paraphrased)	Where Addressed in this Report
§ 257.90(e)(6)	Current status of the groundwater monitoring program.	Section 2
§ 257.90(e)	Summarize key actions completed.	Section 4
§ 257.90(e)	Describe any problems encountered and actions taken to resolve problems.	Section 4.2
§ 257.90(e)	Key activities for upcoming year.	Section 6.0
§ 257.90(e)(1)	Map, aerial image, or diagram of CCR unit and all background and downgradient monitoring wells.	Figure 3-2 and 3-3
§ 257.90(e)(2)	Identification of new monitoring wells installed or abandoned during the preceding year and narrative description.	Section 4.1
§ 257.90(e)(3)	Summary of groundwater data, wells sampled, date sampled, and whether sampling was required under detection or assessment monitoring.	Section 2, 3, 4 and Appendices C and D
§ 257.90(e)(4)	Narrative discussion of any transition between monitoring programs (i.e., from detection to assessment monitoring).	N/A
§ 257.93(c) (via § 257.90(e)(5))	Rate and direction of groundwater flow each time groundwater is sampled.	Section 5.1 and 5.2
§ 257.93(h)	Summary of SSIs over background values for each constituent listed in Appendix III of the CCR Rule.	Section 5.3
§ 257.94(e)(2) (via § 257.90(e)(5))	Any alternate source demonstration reports and related certifications pertaining to a detection monitoring program.	Appendices C and D
§ 257.95(g)(3) (via § 257.90(e)(5))	Any alternate source demonstration reports and related certifications pertaining to an assessment monitoring program.	N/A
§ 257.96(a) (via § 257.90(e)(5))	Any assessment of corrective measures to prevent further releases, remediate any releases, and restore affected area to original conditions, including the related certifications.	N/A
§ 257.97(a) (via § 257.90(e)(5))	Any semi-annual reports describing the progress in selecting and designing a remedy, including the related certifications.	N/A
§ 257.98(e) (via § 257.90(e)(5))	Any notification describing the completion of the selected remedy, including the related certifications.	N/A

2. PROGRAM STATUS § 257.90(E)

The combined RWL and FAR groundwater monitoring system began the 2025 reporting period in detection monitoring. SSIs were identified in one Cow Run Sandstone downgradient monitoring well in the RWL/FAR groundwater monitoring network for calcium, chloride, and TDS in 2025. Regional discharge of naturally occurring brine originating from bedrock was identified as the alternate source for the SSIs. Therefore, the RWL/FAR remains in detection monitoring at the end of the 2025 reporting period.

3. BACKGROUND

3.1 DESCRIPTION OF CCR UNITS

The RWL is approximately 400 acres in size and is located about 1.25 miles northwest of the Plant (Figure 3-1). The CCR material disposed of in the RWL is Flue Gas Desulfurization byproduct (consisting of scrubber cake, fly ash, and lime) and other approved materials (water treatment sludge, bottom ash, lime ball mill rejects, coal pulverizer rejects, and sand/moss from the vertical flow wetlands).

The FAR is approximately 300 acres in size and is located about 2.5 miles northwest of the Plant (Figure 3-1). From the mid-1970s until January 1995, fly ash was sluiced to the FAR and the settled CCR materials in the FAR were retained behind the Stingy Run Fly Ash Dam that formed the FAR. The FAR was closed in place, and the closure was completed in 2021. Closure was certified on July 30, 2021.

3.2 GEOLOGY AND HYDROGEOLOGY

The shallowest geologic materials at the FAR/RWL include mine spoil, fill, residual fine-grained soils, and weathered and fractured bedrock (ERM 2021a). Measured hydraulic conductivities for residual fine-grained soils range from 1.03×10^{-8} centimeters per second (cm/sec) to 5.60×10^{-9} cm/sec (AEP, 1993). The shallowest, weathered and fractured bedrock present at the Site includes the Pomeroy Sandstone and Coal, the Pittsburgh Sandstone and Coal, the Bellaire Sandstone, and the Connellsville Sandstone units. Although some of these units may be partially or fully saturated in the vicinity of the FAR and RWL, these formations generally are not capable of yielding usable quantities of groundwater and thus are not considered part of the uppermost aquifer at the FAR/RWL. In the vicinity of the Site, bedrock dips to the southeast at approximately 17 feet/mile (AEP 1993).

The Connellsville Sandstone is still present in portions of the ridges that surround the FAR valley and the RWL. However, the Connellsville Sandstone has been completely eroded in substantial portions of the valley areas of the FAR, especially at the eastern extent of the FAR nearest the former Stingy Run Dam. The Connellsville Sandstone has also been partially or completely eroded in portions of the valley areas underlying the RWL.

Beneath the Connellsville Sandstone are the Clarksburg Red Beds, which is a regionally extensive aquitard (low-permeability rock layer) with a typical thickness of approximately 40 to 50 feet and average hydraulic conductivity values for the formation ranging from 2.1×10^{-7} cm/sec to 7.8×10^{-8} cm/sec (Geosyntec, 2012). The Clarksburg Red Beds hydraulically isolate the shallower bedrock formations from the underlying aquifers. The Clarksburg Red Beds have been observed to be partially or entirely eroded in portions of the valley areas of the FAR and RWL, especially in the eastern extent of the FAR valley areas. However, residual fine-grained soils generated in-situ by the weathering process are generally present in areas where erosion of the Clarksburg Red Beds has occurred. Based upon measured hydraulic conductivity values for the residual fine-grained soils (1.03×10^{-8} cm/sec to 5.60×10^{-9} cm/sec), these soils provide hydraulic separation similar to that provided by the Clarksburg Red Beds. Beneath the Clarksburg Red Beds are the Morgantown

Sandstone and the Cow Run Sandstone. Together these two units are interpreted as the uppermost aquifer beneath the RWL and FAR (Geosyntec 2016a; Geosyntec 2016b).

The Morgantown Sandstone is composed of two thin sandstone beds (upper and lower), which are separated by clay shale. The Morgantown Sandstone unit has a total average thickness of approximately 30 feet, and the upper and lower sandstone beds generally range in thickness from approximately three to seven feet. It has been documented through review of historical boring logs that the Morgantown Sandstone has been removed by erosion and is absent in portions of the Stingy Run and Kyger Creek valley areas. The Morgantown Sandstone was also confirmed to be absent at recent boring 2022-06, which was advanced in 2022 in the Stingy Run valley at the northeastern end of the RWL (ERM 2024). Groundwater migrating east-southeast within the Morgantown Sandstone along the eastern portion of the RWL discharges to the alluvial aquifer located within the Stingy Creek and Kyger Creek valleys. Thus, the alluvial aquifer is also considered part of the uppermost aquifer where the Morgantown Sandstone is absent in these areas.

Below the Morgantown Sandstone is a unit of approximately 60 feet of interbedded claystone/clay shale and non-crystalline limestone layers, collectively known as the Round Knob Shale. These strata extend to the top of the underlying Cow Run Sandstone. Together, the residual fine-grained soils, the Clarksburg Red Beds, and the Round Knob Shale unit provide hydraulic separation from the aquifers underlying the RWL. Though the Clarksburg Red Beds have been partially or entirely eroded in portions of the FAR valley areas, the residual fine-grained soils and deeper Round Knob Shale unit provide hydraulic separation from the aquifers underlying the FAR similar to that provided by the collective lithologic units underlying the RWL.

Below the Round Knob Shale, the Cow Run Sandstone has an average thickness of 30 feet and is characterized regionally as a coarse-grained sandstone and sandy shale. The Cow Run Sandstone unit is continuous under the FAR/RWL and considered the base of the uppermost aquifer. Beneath the Cow Run Sandstone are the Portersville Limestone and the Anderson Clayshale which consist primarily of shale, claystone, and clay shale (Geosyntec 2012). These low permeability formations are interpreted to be the lower hydraulic boundary of the uppermost aquifer.

3.2.1 GROUNDWATER FLOW

The removal of strip mine ponds, installation of groundwater intercept (GWI) drains, and placement of the composite liner under the RWL resulted in decreased recharge to the Morgantown Sandstone and Cow Run Sandstone. The changes during and post-construction were interpreted to result in the decline of potentiometric elevations up to 10 feet, which is similar to observed declines at another AEP residual waste landfill (AEP 1993).

At a regional scale, groundwater within the Morgantown Sandstone and Cow Run Sandstone generally flows from the northwest to the southeast under the FAR and the RWL toward the Ohio River, which is the primary regional discharge boundary for groundwater. At Site-scale, several factors influence groundwater flow directions in the area of the FAR/RWL, including topographic ridges and suppression of infiltration related to the FAR cap and the liner system of the RWL. Ridges along the western, eastern, and southern perimeters of the RWL constitute areas of

recharge. Due to removal of strip mine ponds, installation of GWI drains, and placement of the composite liner, recharge to the center of the RWL has been cut off (AEP, 1993). Recent potentiometric surface maps, including those prepared for this report (See Section 5.1), incorporate not only the information from existing monitoring wells but also consider additional relevant data including original land surface topography, current land surface topography, landfill expansion, remaining recharge areas outside of the landfill expansion, and any effect of the GWIs.

3.2.1.1 GROUNDWATER FLOW ALONG THE WESTERN BOUNDARY OF THE RWL/FAR

To the west of the FAR/RWL, groundwater flows from west to east before joining the overall flow pattern to the southeast. The interpretation of west to east groundwater flow at the western boundary of the RWL is based on specific past and current observations along the western boundary. Groundwater flow maps prepared for the 1993 RWL Permit to Install (AEP, 1993; Figure No. 21) and the 1999 reissued Potentiometric Map of the RWL (AEP Drawing No. 3J of Drawing 12-30729-5) both interpreted groundwater flow from west to east in the Morgantown Sandstone from a recharge area near wells 94131 toward the historical valley near Pond 1. The potentiometric contours in AEP Figure No. 21 and AEP Drawing No. 3J of Drawing 12-30729-5 also indicate a recharge area farther north, near wells 93102 and 94125, with components of groundwater flow to the southeast and east along the northwestern RWL boundary.

The 1960 USGS topographic map shows a topographic ridge existed east of Turkey Run Road, in the area that would become the western boundary of the RWL (USGS, 1960). The correlation of the potentiometric highs in the Morgantown Sandstone on the 1993 and 1999 figures referenced above and topographic highs suggests the area east of Turkey Run Road was a recharge area prior to the construction of the RWL. The USGS quadrangle notes the presence of historical mines in this area, which is interpreted to enhance recharge along ridges due to mine collapse and the presence of near-vertical fractures. While there has been some modification of the land surface in recent years associated with the westward expansion of the RWL, the current land surface topography still consists of a ridge between the RWL and Turkey Run Road.

The RWL is located on the eastern side of this surface and groundwater ridge, so groundwater flow is interpreted to be from west to east at the western edge of the RWL, consistent with gravity-driven groundwater flow from areas of higher topographic relief to areas of lower topographic relief (Toth, 2009). This west to east flow pattern indicated in the 1993 interpretation is expected to be enhanced due to the reduction in recharge caused by removal of strip mine ponds that had acted as local recharge points within and near the RWL, installation of GWI drains which currently facilitate the movement of shallow groundwater to areas outside the RWL, and installation of the RWL liner which by design inhibits the downward migration of water (AEP, 1993).

Groundwater flow maps provided in the 2018 through 2024 Annual Groundwater Monitoring and Corrective Action Reports consistently show an easterly flow component in the Morgantown and Cow Run Sandstone (ERM, 2019; ERM, 2020; ERM, 2021c; ERM, 2022; ERM, 2023; ERM, 2024; ERM, 2025). Justification for this interpretation based on potentiometric elevation data includes the following:

- The potentiometric surface at Morgantown well 2019-02 was higher than nearby Morgantown wells 2019-06 and 9535 in five out of six gauging events conducted between 2020 and 2022. The physical configuration of the wells and the measured piezometric elevations indicate an eastward groundwater flow direction in the Morgantown Sandstone on the western side of the RWL.
- The potentiometric surface at Cow Run monitoring well 94126 was higher than nearby well 93100 in five out of six gauging events conducted between 2018 and 2019. The physical configuration of the wells and the measured piezometric elevations indicate an eastward groundwater flow direction in the Cow Run Sandstone on the western side of the RWL.
- A comparison of potentiometric elevation data at wells 94125 and 2019-06 also supports the eastward flow interpretation. Well 94125 was abandoned in 2019 due to RWL expansion and replaced in 2020 by 2019-06, which was located 450 feet to the west, outside the new boundary of waste. The average potentiometric elevation at 94125 from 2013 to 2019 was 589.47 feet above sea level and the average elevation at 2019-06 from 2020 to 2025 is 600.29 feet above sea level. The 10.82-foot difference in average elevation over several years generally supports the interpretation of groundwater flow from west to east.

3.2.1.2 GROUNDWATER FLOW ALONG THE EASTERN BOUNDARY OF THE RWL/FAR

The interpretation of groundwater divides east of the RWL eastern waste boundary and within remnant highwalls (*e.g.*, near wells 94122, MW-15, and MW-16) is based on specific past and current observations along the eastern boundary, similar to those used to assess the groundwater divide along the western boundary of the RWL. The groundwater flow map prepared for the 1993 RWL PTI (AEP, 1993; Figure No. 21) interpreted radial groundwater flow in the Morgantown Sandstone on the eastern side of the RWL from a recharge area near historic well 94122 and existing well 2001. This radial flow pattern is indicative of a recharge area and existed prior to the construction of the RWL.

The 1960 USGS topographic map shows a topographic ridge existed on the eastern boundary of the RWL at historic well 94122 and existing well 2000 (USGS, 1960). A ridge also ran northwest near the former FAR overflow spillway towards wells 2022-04 and 2022-05. Potentiometric highs were documented both on the eastern side of the future RWL near where the Stacker Pad currently exists, and north of where Pond 1 currently exists (AEP, 1993; Drawing No. 3J of Drawing 12-30729-5). The correlation of the potentiometric highs and topographic highs suggests that these areas were recharge areas prior to the construction of the RWL. The USGS quadrangle notes the presence of historical strip mines in this area, which may have enhanced recharge along ridges due to mine collapse and the presence of near-vertical fractures. While there has been some modification of the land surface in recent years associated with the expansion of the RWL, the current land surface topography still consists of a ridge along the eastern and northeastern sides of the RWL.

The groundwater divide prevents groundwater under the RWL from flowing towards the east in this area. West of the hydraulic divide located on the eastern side of the RWL, groundwater flow is

interpreted to be from east to west before turning and flowing to the southeast. This east-to-west flow pattern was and is expected to be enhanced from 1993 interpretations due to the removal of strip mine ponds, installation of GWI drains, and placement of the composite liner that cut off recharge to the aquifer beneath the RWL (AEP, 1993).

3.2.1.3 REFINEMENT IN INTERPRETATION OF GROUNDWATER FLOW BENEATH THE RWL/FAR

In 2018, federal and state groundwater potentiometric elevation data sets for monitoring wells of the Morgantown and Cow Run Sandstone were combined to increase spatial resolution and limit uncertainty in the interpretation of groundwater flow direction. This assessment identified: (i) an area of low hydraulic pressure along the axis of the RWL and FAR; (ii) groundwater flow from west to east on the western boundary of the RWL; and (iii) a potentiometric high on the northeastern boundary of the RWL. The overall interpretation of regional groundwater flow in the Morgantown and Cow Run Sandstone was from northwest to southeast towards the Ohio River. The interpretation of groundwater flow in the vicinity of the RWL/FAR is strongly influenced by site geology, pre-construction topography, and site preparation as hydraulic information is no longer able to be obtained from within the RWL due to the liner system or from within the FAR due to the cap.

Generally, the interpretations of groundwater flow under the RWL have been relatively consistent with overall flow towards the southeast with localized variations near recharge areas. However, recent maps use higher-resolution datasets and differ in some ways from the flow directions and hydraulic features indicated in the 2012 PTI, such as the aforementioned ridge (Geosyntec, 2012). As shown in the 2018 through 2024 Annual GWMCA Reports, existing wells located along the eastern and northeastern boundary of the RWL include couplet wells 2002 and 2003, and 2022-04 and 2022-05, located in the Morgantown and Cow Run Sandstone, respectively. At these locations, the Morgantown Sandstone has a higher potentiometric surface than the Cow Run Sandstone. These downward hydraulic gradients demonstrate the presence of recharge areas. Groundwater flow direction maps prepared for the 2018-2024 Annual GWMCA Reports consistently show groundwater mounds and radial flow in the Morgantown Sandstone in this area.

3.2.2 HYDRAULIC CONDUCTIVITY

Packer tests were completed in 2012 to assess hydraulic conductivity for locations in both the Morgantown and Cow Run Sandstone around the northern portion of the RWL (AEP and Geosyntec 2012). The range of hydraulic conductivity values from the packer tests in the Morgantown and Cow Run are provided in Table 3-1.

TABLE 3-1: ESTIMATED HYDRAULIC CONDUCTIVITY VALUES FOR MORGANTOWN AND COW RUN SANDSTONE

	Average K	**Low K**	**High K**
Morgantown (Geosyntec 2012)	7.18×10^{-5} cm/sec	2.2×10^{-8} cm/sec	4.6×10^{-4} cm/sec
Cow Run (Geosyntec 2012)	2.92×10^{-5} cm/sec	5.0×10^{-8} cm/sec	5.9×10^{-4} cm/sec

Notes: cm/sec = centimeters per second; K = hydraulic conductivity

Geosyntec 2012 values derived from packer tests (10-foot interval) completed in boreholes across mainly the northern part of the RWL.

3.3 MONITORING WELL NETWORK

The RWL and FAR had previously been monitored using separate groundwater monitoring networks as described in the documents: Groundwater Monitoring Network Evaluation—Residual Waste Landfill (Geosyntec 2016a) and the Groundwater Monitoring Network Evaluation—Fly Ash Reservoir (Geosyntec 2016b). Because of the ongoing expansion of the RWL, several monitoring wells along the northern and western RWL boundaries were removed and a portion of the RWL was expanded over the FAR. To account for these changes and provide an adequate groundwater monitoring system for both units, a combined network for the two CCR units was identified and certified in August 2021 (ERM 2021a).

The combined certified network which monitors both the RWL (Figures 3-2) and FAR (Figure 3-3) contains 24 upgradient and 15 downgradient monitoring wells located in the Alluvium, Morgantown Sandstone, and Cow Run Sandstone. The upgradient wells are placed to accurately represent the quality of background groundwater that has not been affected by any potential leakage from the RWL and FAR units, while the downgradient wells in the network are positioned at the downgradient boundary of waste to detect a potential release of CCR constituents from the CCR units into groundwater in the uppermost aquifer. There are additional monitoring wells that are gauged and/or sampled, as required, to provide supplemental information to assist in the interpretation of data received from the certified monitoring network. These wells typically are not located at the downgradient limit of waste or do not reliably yield sufficient water for sampling and are not part of the certified groundwater monitoring network.

In 2022, 14 monitoring wells were installed around the RWL and FAR. Six of these wells were intended to act as replacements for monitoring wells that are included in the certified monitoring network, while the remaining eight were intended as additional groundwater monitoring locations. Two additional monitoring wells were installed in 2025, as discussed in Section 4.1. Monitoring wells installed in 2022 and 2025 are currently being sampled and evaluated for addition to the certified monitoring network as background or compliance wells; these wells are depicted in Figures 3-2 and 3-3.

Well construction information for the monitoring wells in the certified network and replacement monitoring wells installed in 2022-2025 is presented in Appendix A and boring logs and construction logs are provided in Appendix B.

3.4 PREVIOUS GROUNDWATER MONITORING ACTIVITIES

The RWL and FAR groundwater monitoring wells were initially sampled eight times between August 2016 and July 2017 to establish upgradient well baseline data. Prediction limits were developed using the baseline data and compared to the July 2017 downgradient well results, consistent with the CCR Rule and the Statistical Analysis Plan developed for Gavin (ERM 2017). This comparison resulted in the identification of SSIs for Appendix III analytes in downgradient RWL and FAR wells, which were reported in the 2017 Annual Groundwater Monitoring and Corrective Action Reports for the RWL and FAR (ERM 2018a and ERM 2018b). Based on a detailed

review of groundwater elevations and resulting groundwater flow using the certified well network and additional wells that are used for informational purposes only, the hydraulic positions of monitoring wells within the RWL and FAR networks were reevaluated to consider newly obtained information on hydraulic conditions, including groundwater elevations. A limited number of wells were reclassified as either upgradient or downgradient, and tolerance limits were updated based on the newly defined upgradient dataset. That hydraulic analysis and the derivation of the updated tolerance limits are presented in the first ASD reports for the FAR and RWL (ERM 2018c and ERM 2018d). Such ongoing assessment of groundwater flow is a normal part of developing and refining a conceptual site model as new information is collected, especially at a site with multiple aquifers, variable topography, and a history of underground activities. Subsequent sampling and comparison to background values were completed in 2018, 2019, 2020, 2021, 2022, 2023, and 2024.

Following the certification of the combined network, in December 2021, an addendum to the 2020 Annual Groundwater Monitoring and Corrective Action Reports for the FAR and RWL was prepared that evaluated the 2020 data based on the combined groundwater monitoring network (ERM 2021e). While this addendum was not required, it was prepared proactively to identify if the changes to the program resulted in any retroactive SSIs for 2020. Only one SSI was identified when evaluating the data collected in 2020 from the combined monitoring network: boron at monitoring well 2018-01 in March 2020. Although technically not applicable to 2020 (because the combined network was not certified until August 2021), ERM nevertheless prepared an ASD for the boron SSI to determine whether that finding would have changed the monitoring status of either CCR unit. The ASD identified regional brine as the source of boron and identified the use of cement-bentonite grout for well installation as the catalyst for the localized mobilization of previously adsorbed boron. Thus, even if the combined monitoring well network had been in effect in 2020, the RWL and FAR would have remained in detection monitoring at the conclusion of 2020.

4. MONITORING ACTIVITIES

4.1 MONITORING WELL ABANDONMENT AND INSTALLATION

In order to maintain the integrity of the wells included in the certified groundwater monitoring network, monitoring wells 2016-03 and 2016-04 were abandoned in 2024. Downhole camera inspection of the wells and packer testing of well 2016-04 indicated that the wells' integrity was likely compromised. Both wells were decommissioned via the sealing-in-place method. In February 2025, monitoring well 2025-01 was installed in the Morgantown Sandstone as a replacement for well 2016-03. Two borings were made in the Cow Run Sandstone near 2016-04 but did not yield water; thus, a replacement Cow Run monitoring wells could not be installed. These replacement Cow Run borings are designated as 2025-02 and 2025-02R.

In 2025, Gavin observed a shift in water levels at monitoring well 96153R. Downhole camera inspection of the well did not indicate compromised well integrity, so the well was left in place to observe future changes in water level. In November 2025, monitoring well 2025-03 was installed as a replacement for 96153R. Additionally, transducers were installed in monitoring well 2025-03 and nearby wells 96154R and MW-20 at the FAR to monitor potentiometric elevations in the area.

Monitoring wells 2025-01 and 2025-03 will be sampled in 2026 and evaluated for addition to the certified monitoring network as background or compliance wells. These wells are depicted in Figures 3-2 and 3-3, and well construction information and boring logs for well 2025-01 are included in Appendices A and B, respectively. Well 2025-03 is scheduled to be surveyed in Q1 2026; preliminary well construction information is included in Appendix A. The final boring logs will be included in the 2026 Annual Report. Boring logs are also included for borings 2025-02 and 2025-02R.

4.2 2025 SAMPLING SUMMARY

Groundwater samples were collected in 2025 as part of the detection monitoring program under 40 CFR § 257.94 and analyzed for the constituents listed in Appendix III to 40 CFR Part 257, Subpart D. Table 4-1 provides a summary of the 2025 first half of year (H1) and second half of year (H2) sample dates and the well gradient designation (upgradient or downgradient) relative to the CCR units. Samples were collected by bladder pump, submersible pump, Snap sampler, or Geomon pump. In addition, the samples were not filtered in the field or at the laboratory per the requirement of 40 CFR § 257.93(i) and were managed under chain-of-custody procedures from the field to the laboratory.

Some monitoring wells could not be sampled in 2025 due to insufficient recharge/water, and only one monitoring well (94137) could not be sampled in H2 2025 due to pump failure. In many cases, poor recharge and significant depth to groundwater resulted in short water columns that made it challenging to produce enough groundwater to collect sufficient sample volume. In these cases, Gavin is investigating the potential for using passive sampling methods (e.g. dual-membrane passive diffusion bags). All downgradient compliance wells were sampled twice in 2025 except for one; monitoring well 2018-01 was abandoned and replaced in 2022 and replacement monitoring well (2022-17) is under evaluation for incorporation into the certified well network.

TABLE 4-1: 2025 SAMPLING DATES FOR RWL/FAR COMBINED NETWORK

Monitoring Well	Geologic Unit	Location	Sampling Dates	
			H1	H2
2000	Morgantown	Downgradient	March 7, 2025	September 19, 2025
2003	Morgantown	Upgradient	NS[1]	September 15, 2025
9396	Cow Run	Upgradient	Abandoned/Replaced (2022-19)	
9631	Cow Run	Downgradient	March 5, 2025	September 17, 2025
9801	Cow Run	Upgradient	March 27, 2025	September 16, 2025
9802	Alluvium	Downgradient	March 6, 2025	September 16, 2025
9806	Morgantown	Downgradient	March 4, 2025	September 15, 2025
9910	Morgantown	Upgradient	NS[1]	NS[1]
93100	Cow Run	Upgradient	March 12, 2025	September 19, 2025
93108	Morgantown	Downgradient	March 5, 2025	September 15, 2025
94136	Cow Run	Downgradient	March 7, 2025	September 17, 2025
94137	Alluvium	Downgradient	March 7, 2025	December 22, 2025
94139	Morgantown	Upgradient	March 27, 2025	September 19, 2025
96152	Morgantown	Upgradient	March 13, 2025	October 2, 2025
96153R	Morgantown	Upgradient	NS[1]	NS[1]
96154R	Morgantown	Upgradient	March 17, 2025	September 12, 2025
96156	Morgantown	Upgradient	Abandoned/Replaced (2022-18)	
96157	Alluvium	Downgradient	March 14, 2025	September 11, 2025
96158	Cow Run	Downgradient	March 14, 2025	September 11, 2025
2016-03	Morgantown	Upgradient	Abandoned/Replaced (2025-01)	
2016-04	Cow Run	Upgradient	Abandoned	
2016-05	Morgantown	Downgradient	March 12, 2025	September 17, 2025
2016-06	Cow Run	Downgradient	March 26, 2025	September 10, 2025
2016-07	Morgantown	Upgradient	March 26, 2025	September 11, 2025
2016-08	Cow Run	Upgradient	Abandoned/Replaced (2022-15)	

Monitoring Well	Geologic Unit	Location	Sampling Dates	
			H1	H2
2016-09	Cow Run	Upgradient	Abandoned/Replaced (2022-16)	
2016-10	Cow Run	Upgradient	April 1, 2025	September 10, 2025
2016-11	Morgantown	Upgradient	NS[1]	NS[1]
2018-01	Cow Run	Downgradient	Abandoned/Replaced (2022-17)	
2018-02	Morgantown	Downgradient	March 6, 2025	September 18, 2025
2018-03	Cow Run	Downgradient	March 6, 2025	September 18, 2025
2018-04	Morgantown	Downgradient	March 6, 2025	September 18, 2025
2019-02	Morgantown	Upgradient	Abandoned/Replaced (2022-14)	
2019-06	Morgantown	Upgradient	NS[1]	NS[1]
2019-07	Cow Run	Upgradient	April 8, 2025	September 22, 2025
2019-09	Cow Run	Upgradient	April 8, 2025	September 22, 2025
2025-01	Morgantown	Upgradient	NS[2]	October 27, 2025
2025-03	Morgantown	Upgradient	Well installed November 9, 2025	
MW-16	Morgantown	Upgradient	NS[1]	NS[1]
MW-17	Cow Run	Upgradient	March 5, 2025	September 15, 2025
MW-20	Cow Run	Upgradient	March 13, 2025	September 22, 2025

Notes: H1 = spring; H2 = fall; NS = Not Sampled

[1] Not sampled due to insufficient volume of water to allow collection of samples.

[2] Monitoring well 2025-01 was installed in February 2025 and was sampled for the first time in H2 2025.

The monitoring wells installed in 2022 have been under observation to determine if water levels have reached equilibrium with their respective aquifers. In 2025, samples were collected at locations with sufficient water columns for low-flow sampling. At locations with short water columns, Gavin is investigating the potential for using passive sampling methods.

In addition to the semiannual groundwater monitoring events at the Site required under 40 CFR § 257.94, supplemental samples were collected at wells in the combined monitoring network under 40 CFR § 257.94(b). Samples were collected on a monthly or bi-monthly basis throughout 2025 from existing wells that were added to the network in 2021 (9910, 2025-01, 2025-02) towards the required minimum of eight independent samples for each background well for the constituents listed in Appendices III and IV.

4.3 DATA QUALITY REVIEW

ERM reviewed field and laboratory documentation to assess the validity, reliability, and usability of the analytical results. Samples collected in 2025 were analyzed by the Eurofins Canton/Cleveland laboratory, located in Barberton, Ohio. Data quality information reviewed for these results included field sampling forms, chain-of-custody documentation, holding times, laboratory methods, cooler temperatures, laboratory method blanks, laboratory control sample recoveries, field duplicate samples, matrix spikes/matrix spike duplicates, and equipment blanks. Data qualifiers were appended to results in the project database, as appropriate, based on laboratory quality measurements (e.g., control sample recoveries) and field quality measurements (e.g., agreement between normal and field duplicate samples). ERM's data quality review found the laboratory analytical results to be valid, reliable, and usable for decision making purposes with the listed qualifiers. No analytical results were rejected.

5. MONITORING RESULTS

5.1 GROUNDWATER POTENTIOMETRIC CONTOURS AND FLOW DIRECTION

Depth to groundwater measurements were collected in February and September 2025 at each monitoring well prior to each sampling event. Resulting potentiometric elevations were calculated by subtracting the depth to groundwater from the surveyed reference elevation for each well. Potentiometric elevations, interpreted potentiometric surface maps, and interpreted groundwater flow directions in the Morgantown Sandstone (and alluvium) and Cow Run Sandstone are presented on Figures 5-1 and 5-2 (2025 H1) and Figures 5-3 and 5-4 (2025 H2), respectively.

The principal direction of groundwater flow in the uppermost aquifer system under the RWL and FAR (both in the Morgantown Sandstone and in Cow Run Sandstone) is from the north and northwest to the east and southeast, towards the Ohio River which is the local discharge boundary. Groundwater velocity estimates are presented in the next sections.

5.2 GROUNDWATER VELOCITY CALCULATION

5.2.1 MORGANTOWN SANDSTONE GROUNDWATER VELOCITY

Horizontal hydraulic gradients were calculated for the Morgantown Sandstone using groundwater elevations calculated at wells 96154R and 2018-02 for both the spring and fall sampling events. The velocity of groundwater through the Morgantown Sandstone is estimated based on the measured horizontal hydraulic gradient, an estimated hydraulic conductivity of 7.18×10^{-5} centimeters per second (Geosyntec 2012), and an estimated effective porosity value of 0.01 for fractured bedrock. Measured horizontal hydraulic gradients across the Morgantown Sandstone, as measured between 96154R and 2018-02, were 0.011 for the February 2025 event and 0.010 for the September 2025 event. This resulted in an estimated average groundwater velocity of 78 to 79 feet/year. Groundwater velocities in 2025 were similar to those calculated in 2024 (77 to 78 feet/year).

5.2.2 COW RUN SANDSTONE GROUNDWATER VELOCITY

Horizontal hydraulic gradients were calculated for the Cow Run Sandstone using groundwater elevations calculated at wells 96149 and 94136 for both the spring and fall sampling events. The velocity of groundwater through the Cow Run Sandstone is estimated based on the measured horizontal hydraulic gradient, the estimated hydraulic conductivity of 2.92×10^{-5} centimeters per second (Geosyntec 2012), and an effective porosity value of 0.01 for fractured bedrock. Measured horizontal hydraulic gradients across the Cow Run Sandstone, as measured between 96149 and 94136, were 0.010 for the February 2025 event and 0.011 for the September 2025 event. This resulted in an estimated average groundwater velocity of 31 to 32 feet/year. Groundwater velocities in 2025 matched those calculated in 2024 (31 to 32 feet/year).

5.3 COMPARISON OF RESULTS TO PREDICTION LIMITS

Consistent with the CCR Rule and with Gavin's Statistical Analysis Plan (ERM 2017), an interwell prediction limit approach was used to identify potential impacts to groundwater. Upper prediction

limits were developed for the Appendix III parameters; in the case of pH, a lower prediction limit was also developed. Documentation of the development of the upper prediction limits and lower prediction limit is provided in the 2018 Alternate Source Demonstration (ERM 2018c).

5.3.1 2025 SAMPLING EVENT RESULTS

Table 5-1 identifies no SSIs in the Morgantown/Alluvium downgradient wells and Table 5-2 identifies SSIs in one Cow Run downgradient well for the March/April (H1) and September/October (H2) 2025 monitoring events based on a comparison of the sampling results in downgradient wells to the prediction limits for the respective Appendix III analytes.

TABLE 5-1: NO SSIs FROM 2025 SAMPLING EVENTS—MORGANTOWN/ALLUVIUM

	Monitoring Well																	
	2000		93108		94137		96157		9802		9806		2016-05		2018-02		2018-04	
Analyte/Event	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2
Boron	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ
Calcium	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ
Chloride	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ
Fluoride	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ
pH	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ
Sulfate	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ
Total Dissolved Solids	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ

Notes: H1 = spring; H2 = fall; ϕ = No SSI; SSI = statistically significant increase; NS = not sampled

TABLE 5-2: SSIs FROM 2025 SAMPLING EVENTS—COW RUN

	Monitoring Well											
	94136		96158		9631		2016-06		2018-01		2018-03	
Analyte/Event	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2
Boron	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	NS	NS	ϕ	ϕ
Calcium	ϕ	ϕ	ϕ	ϕ	X	X	ϕ	ϕ	NS	NS	ϕ	ϕ
Chloride	ϕ	ϕ	ϕ	ϕ	X	X	ϕ	ϕ	NS	NS	ϕ	ϕ
Fluoride	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	NS	NS	ϕ	ϕ
pH	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	NS	NS	ϕ	ϕ
Sulfate	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	NS	NS	ϕ	ϕ
Total Dissolved Solids	ϕ	ϕ	ϕ	ϕ	X	X	ϕ	ϕ	NS	NS	ϕ	ϕ

Notes: H1 = spring; H2 = fall; NS = not sampled; ϕ = No SSI; X = SSI; SSI = statistically significant increase
Monitoring well 2018-01 was abandoned in Fall 2022.

Spring 2025 SSIs were attributed to alternate sources, which were documented in the *Gavin RWL and FAR First Semiannual Sampling Event of 2025 ASD Report* which is included as Appendix C. The 2025 H1 ASD report identified regional discharge of naturally occurring brine originating from bedrock as the alternate source.

Fall 2025 SSIs were attributed to alternate sources, which were documented in the *Gavin RWL and FAR Second Semiannual Sampling Event of 2025 ASD Report*, which is included as Appendix D. The 2025 H2 ASD report identified regional discharge of naturally occurring brine originating from bedrock as the alternate source.

A summary of analytical results obtained from the RWL/FAR groundwater monitoring is provided in Appendix E. Laboratory analytical reports from both the spring and the fall sampling events as well as the supplemental sampling events are provided in Appendix F.

6. KEY FUTURE ACTIVITIES

The following key future activities are planned for 2026:

Groundwater Sampling

- Two groundwater sampling events will be performed in 2026 as part of the detection monitoring program at the RWL/FAR and the results will be compared to the prediction limits.
- Monitoring wells that were installed in 2022 and 2025 will continue to be sampled and evaluated for addition to the certified monitoring network for use as background or compliance wells.
- Dedicated groundwater sampling pumps will continue to be inspected and repaired, or replaced, as necessary.
- Pilot testing of passive sampling methods will continue at locations where sample collection has been challenging due to low recharge resulting in low sample volume.

Groundwater Hydraulic Monitoring

- Monitoring wells installed in 2022 and 2025 will continue to be gauged along with existing monitoring wells to establish relative hydraulic positions and evaluate areas of interest (e.g., the hydraulic ridges around the RWL).
- Transducers have been installed in seven monitoring wells around the RWL/FAR. In 2026, transducer data will be downloaded, and the data processed and evaluated to support updates to the Conceptual Site Model.

Monitoring Network

- The existing monitoring network will be evaluated for potential additional wells.
- The background dataset will be evaluated and updated, if appropriate, to include all valid background data.

7. REFERENCES

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FIGURES

Figure 1-1: Gavin Plant Location
Gavin Generating Station
Cheshire, Ohio

ERM

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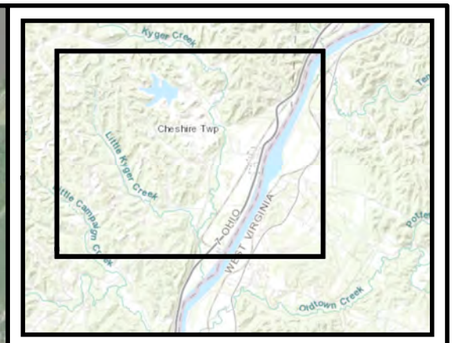
Fly Ash Reservoir

Residual Waste Landfill

Bottom Ash Pond

Ohio River



Legend

- Bottom Ash Pond
- Fly Ash Reservoir
- Residual Waste Landfill
- Property Boundary

NOTES:
1. Aerial Imagery: ESRI World Imagery
   Reproduced under license in ArcGIS 10.8

N

0 500 1,000 2,000 3,000 4,000
Feet

Figure 3-1: RWL and FAR Locations
Gavin Generating Station
Cheshire, Ohio

ERM

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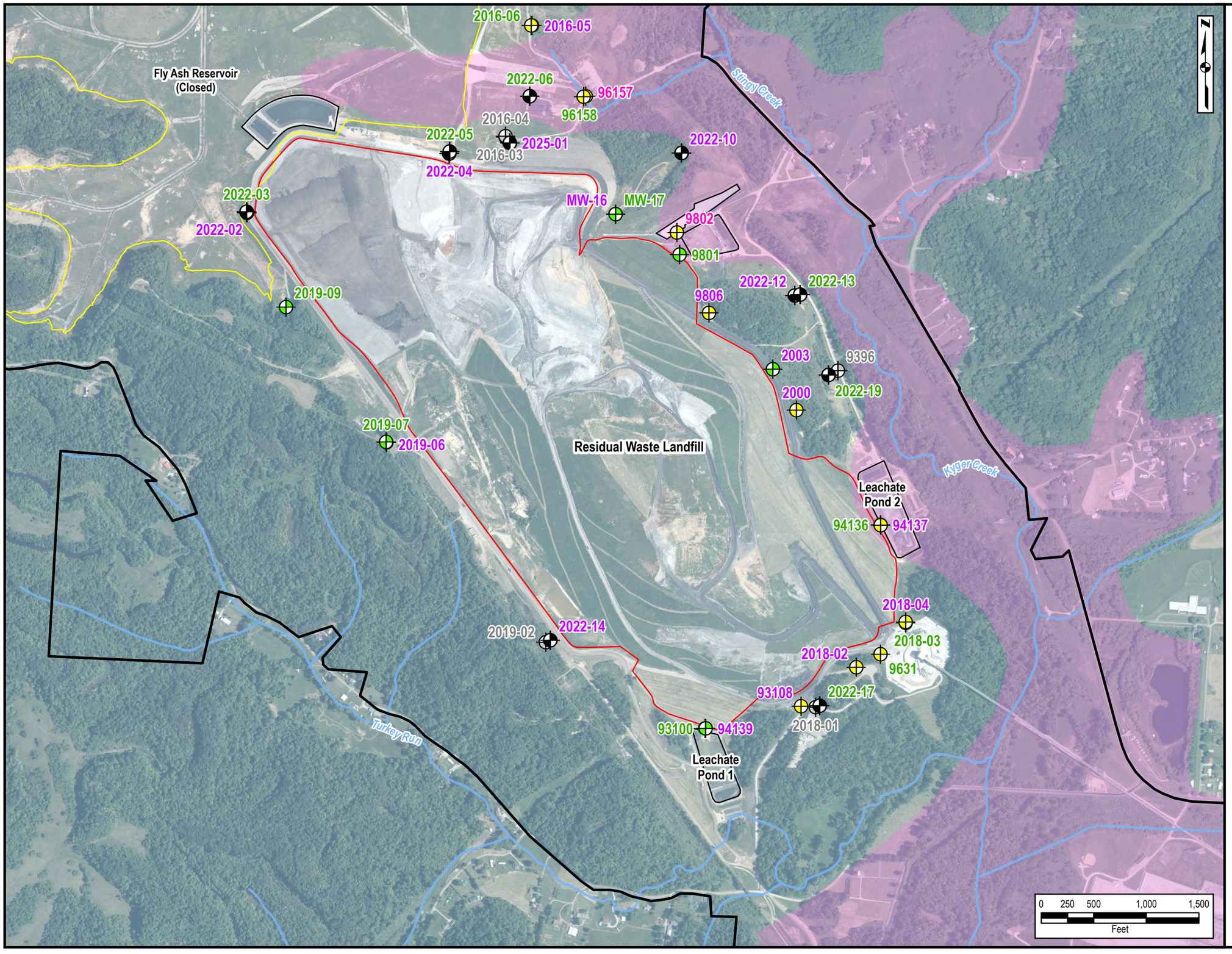

Legend

- Federal Upgradient Monitoring Well
- Federal Downgradient Monitoring Well
- Supplemental Monitoring Well (Under Evaluation for Inclusion in Network)
- Abandoned Well
- Stream/Creek
- Pond Area
- Residual Waste Landfill
- Fly Ash Reservoir
- Gavin Property Boundary
- Interpreted area where the Morgantown Sandstone has been eroded and is not present (based on borehole logs and topographic analysis)
- 94138 Alluvium Monitoring Well
- 93108 Morgantown Monitoring Well
- 93105 Cow Run Monitoring Well
- 96156 Abandoned Well

NOTES:

1. Aerial Imagery: USDA National Agriculture Imagery Program (NAIP), May 2023

Figure 3-2: Federal Monitoring Well Locations
Residual Waste Landfill Area
Gavin Power, LLC
Cheshire, Ohio

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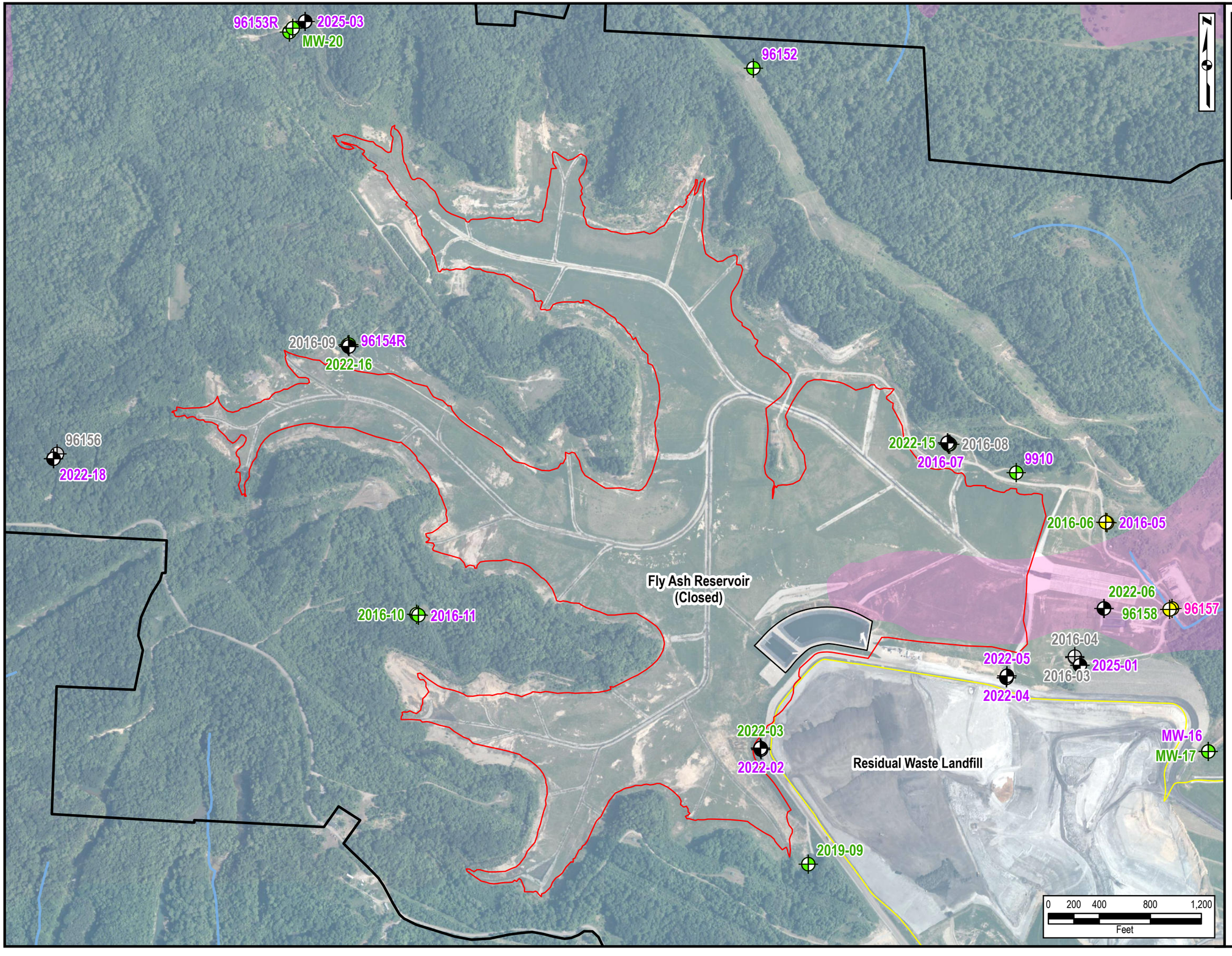

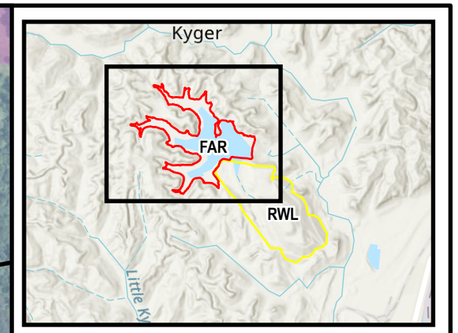

Legend

- Federal Upgradient Monitoring Well
- Federal Downgradient Monitoring Well
- Supplemental Monitoring Well (Under Evaluation for Inclusion in Network)
- Abandoned Well
- Stream/Creek
- Pond Area
- Fly Ash Reservoir
- Residual Waste Landfill
- Gavin Property Boundary
- Interpreted area where the Morgantown Sandstone has been eroded and is not present (based on borehole logs and topographic analysis)
- 94138 Alluvium Monitoring Well
- 93108 Morgantown Monitoring Well
- 93105 Cow Run Monitoring Well
- 96156 Abandoned Well

NOTES:

1. Aerial Imagery: USDA National Agriculture Imagery Program (NAIP), May 2023

Figure 3-3: Federal Monitoring Well Locations
Fly Ash Reservoir Area
Gavin Power, LLC
Cheshire, Ohio

ERM

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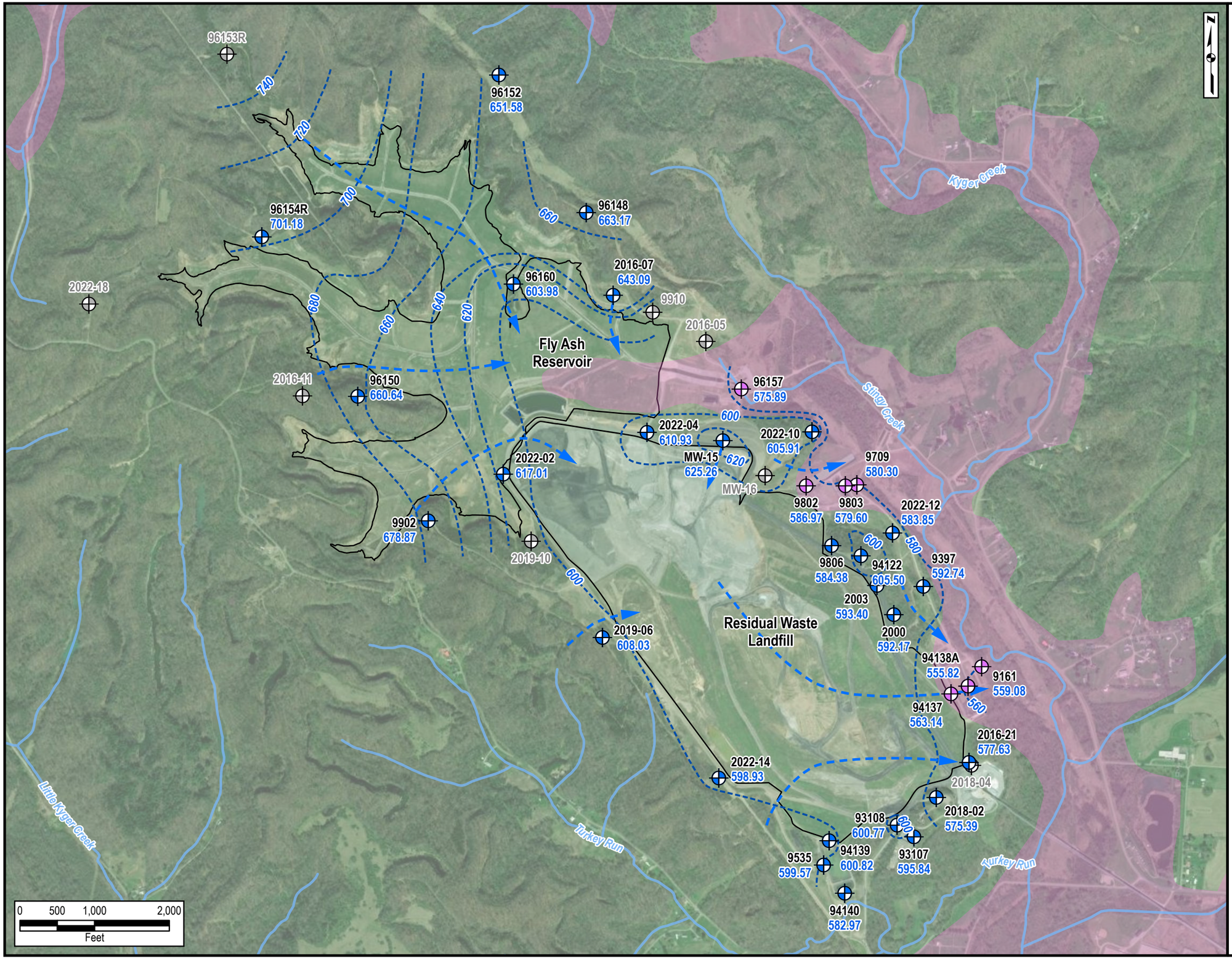
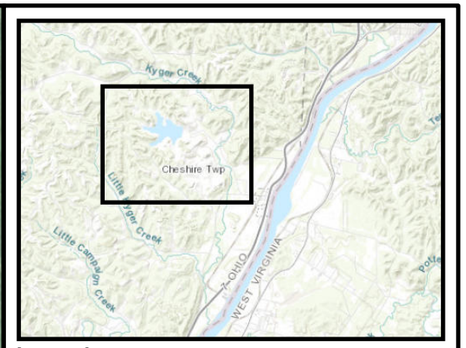




Legend

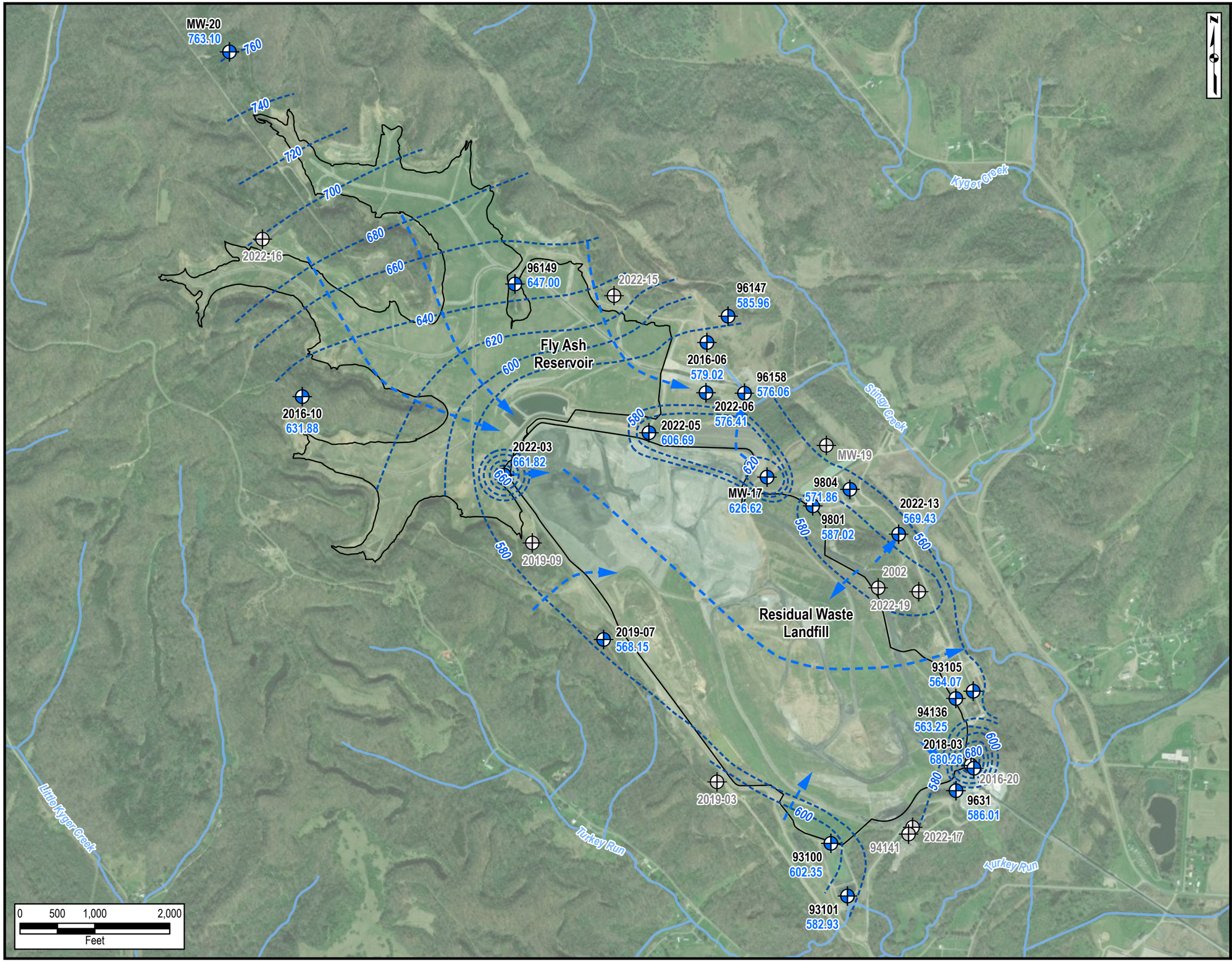
- Morgantown Sandstone Monitoring Well
- Morgantown Sandstone Monitoring Well - Low Recharge, Dry, Data Anomaly, or Not Gauged
- Alluvium Monitoring Well
- 605.82 Groundwater Elevation (ft)
- H1 2025 Interpreted Groundwater Potentiometric Contour
- H1 2025 Interpreted Generalized Groundwater Flow Direction
- Stream/Creek
- Coal Combustion Residual Unit
- Interpreted area where the Morgantown Sandstone has been eroded and is not present (based on borehole logs and topographic analysis)

NOTES:

- Interpreted contours based on groundwater gauging conducted on 2/24/2025 - 2/25/2025.
- Some groundwater elevation contours were interpreted using historical groundwater trends in monitoring wells that were not gauged in February 2025.
- Where the Morgantown SS is absent, the contours represent the potentiometric surface in the alluvial aquifer because these aquifers are hydraulically connected.
- H1 refers to the first half of 2025.

Figure 5-1: Morgantown Sandstone Groundwater Flow Directions
H1 2025
Gavin Power, LLC
Cheshire, Ohio

ERM



Legend

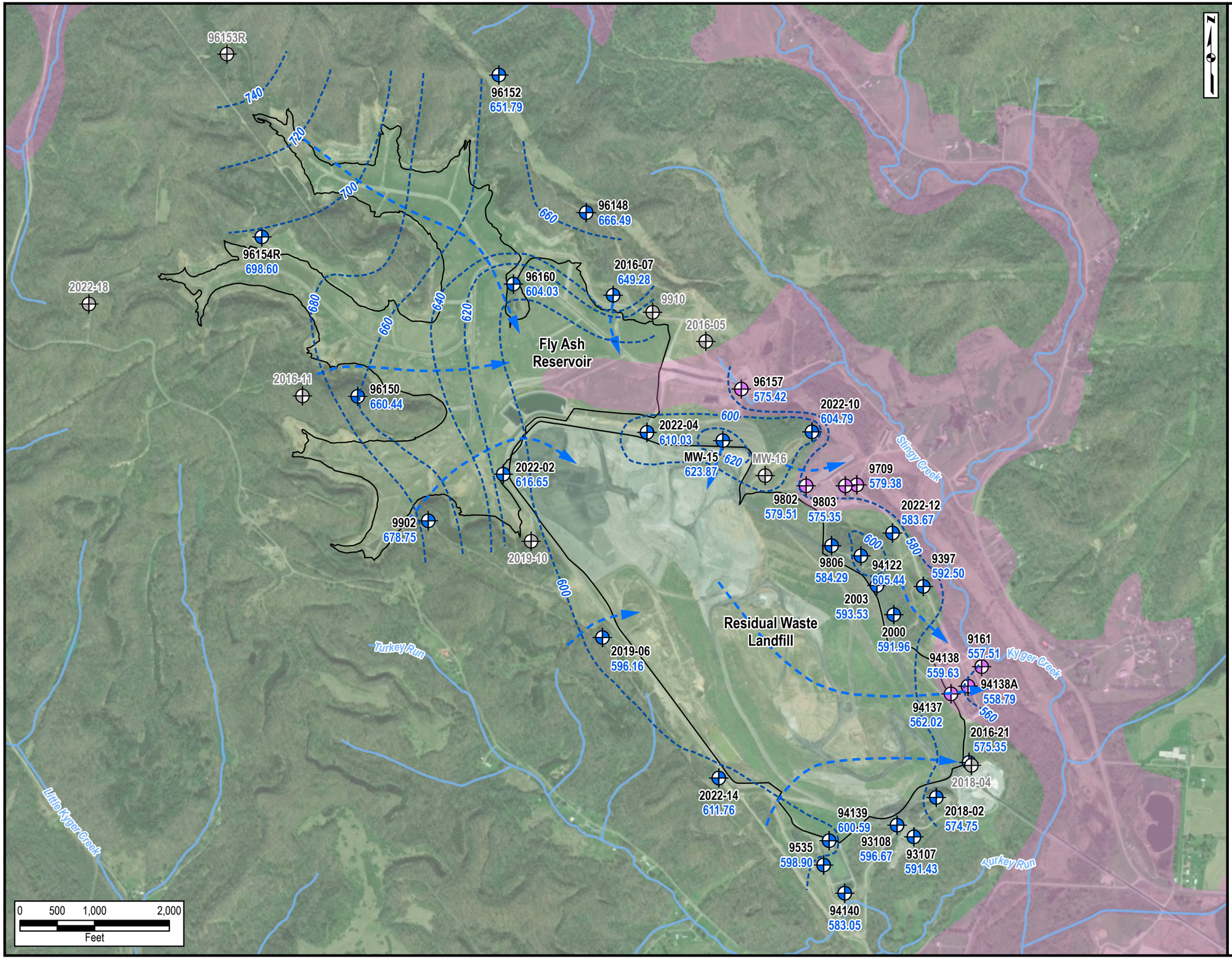
- Cow Run Sandstone Monitoring Well
- Cow Run Sandstone Well - Low Recharge, Dry, or Data Anomaly
- 605.82 Groundwater Elevation (ft)
- H1 2025 Interpreted Groundwater Potentiometric Contour
- H1 2025 Interpreted Generalized Groundwater Flow Direction
- Stream/Creek
- Coal Combustion Residual Unit

NOTES:

- Cow Run Sandstone is present through entire site.
- Interpreted contours based on groundwater gauging conducted on 2/24/2025 - 2/25/2025.
- Some groundwater elevation contours were interpreted using historical groundwater elevation trends in monitoring wells that were not gauged in February 2025.
- H1 refers to the first half of 2025.

Figure 5-2: Cow Run Sandstone Groundwater Flow Directions H1 2025
Gavin Power, LLC
Cheshire, Ohio

ERM



Legend

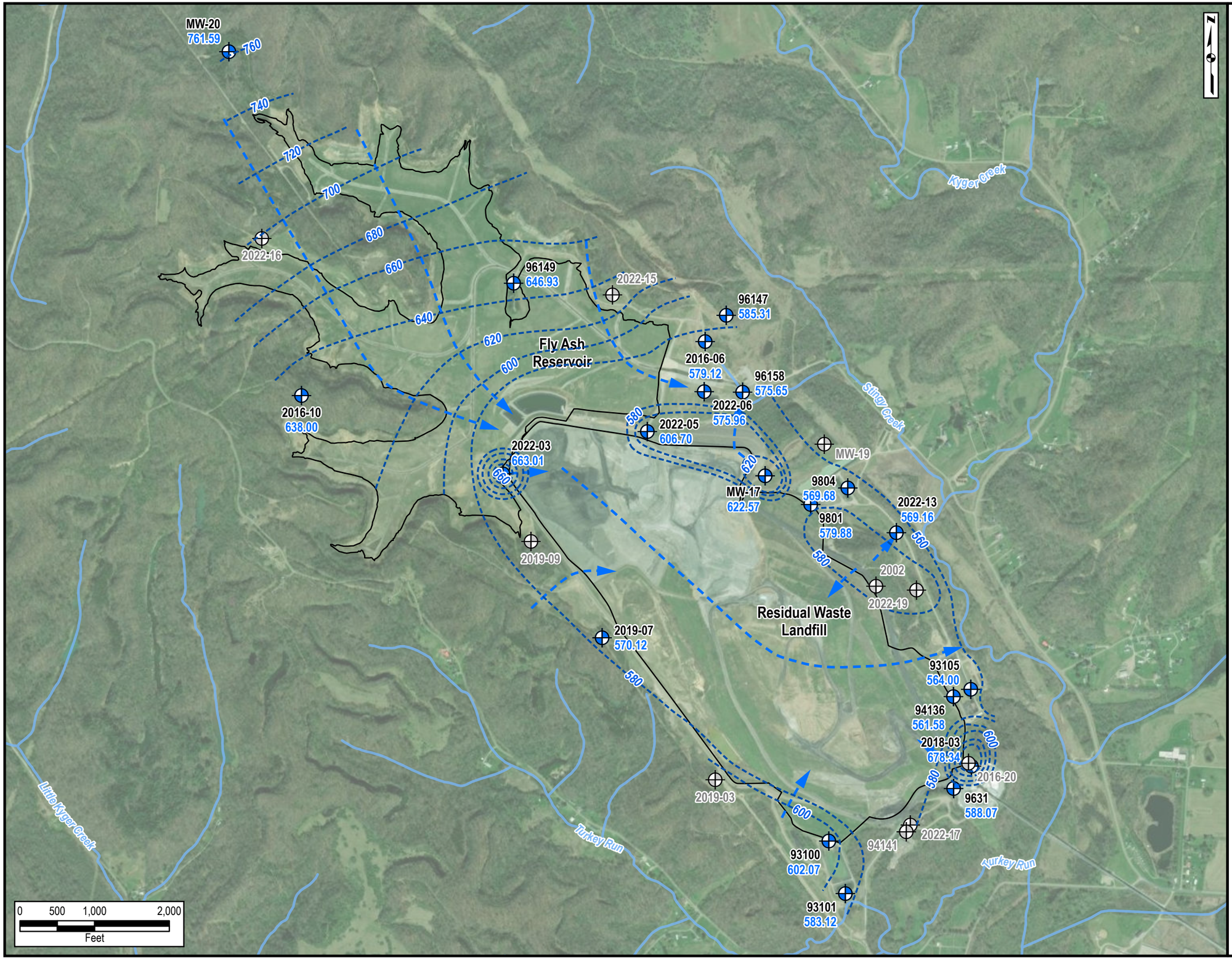
- Morgantown Sandstone Monitoring Well
- Morgantown Sandstone Monitoring Well - Low Recharge, Dry, Data Anomaly, or Not Gauged
- Alluvium Monitoring Well
- 605.82 Groundwater Elevation (ft)
- H2 2025 Interpreted Groundwater Potentiometric Contour
- H2 2025 Interpreted Generalized Groundwater Flow Direction
- Stream/Creek
- Coal Combustion Residual Unit
- Interpreted area where the Morgantown Sandstone has been eroded and is not present (based on borehole logs and topographic analysis)

NOTES:

- Interpreted contours based on groundwater gauging conducted on 9/8/2025 - 9/9/2025.
- Some groundwater elevation contours were interpreted using historical groundwater trends in monitoring wells that were not gauged in September 2025.
- Where the Morgantown SS is absent, the contours represent the potentiometric surface in the alluvial aquifer because these aquifers are hydraulically connected.
- H2 refers to the second half of 2025.

Figure 5-3: Morgantown Sandstone Groundwater Flow Directions
H2 2025
Gavin Power, LLC
Cheshire, Ohio

ERM



Legend

- Cow Run Sandstone Monitoring Well
- Cow Run Sandstone Well - Low Recharge, Dry, or Data Anomaly
- 605.82 Groundwater Elevation (ft)
- H2 2025 Interpreted Groundwater Potentiometric Contour
- H2 2025 Interpreted Generalized Groundwater Flow Direction
- Stream/Creek
- Coal Combustion Residual Unit

NOTES:

- Cow Run Sandstone is present through entire site.
- Interpreted contours based on groundwater gauging conducted on 9/8/2025 - 9/9/2025.
- Some groundwater elevation contours were interpreted using historical groundwater elevation trends in monitoring wells that were not gauged in September 2025.
- H2 refers to the second half of 2025.

Figure 5-4: Cow Run Sandstone Groundwater Flow Directions H2 2025
Gavin Power, LLC
Cheshire, Ohio

ERM

APPENDIX A WELL CONSTRUCTION SUMMARY

Appendix A
Well Construction Details
Gavin Residual Waste Landfill and Fly Ash Reservoir
Cheshire, OH

Privileged and Confidential
Attorney-Client Communication
Attorney Work Product
Prepared at the Request of Counsel

Well ID	Boring Completion Date	Hydrogeologic Unit	Site Area	Latitude	Longitude	Top of Borehole Elevation (ft)	Top of Casing Elevation (ft)	Total Well Depth (ft bgs)	Screen Start Depth (ft bgs)	Screen End Depth (ft bgs)	Screen Length (ft)	Well Diameter (in)	Screen Material
Federal CCR Monitoring Wells													
2000	2/10/2000	Morgantown	RWL	2072693.04	348163.03	716.68	718.43	150.4	119.6	148.6	29	2	PVC SCH 40
2003	3/7/2000	Morgantown	RWL	2072467.35	348553.78	724.28	726.56	143.98	122.7	141.7	19	2	PVC SCH 40
9396	2/8/1993	Cow Run	RWL	2073087.37	348540.79	613.61	616.22	121.4	114.8	116.8	2	1	NA
9631	10/17/1996	Cow Run	RWL	2073493.05	345839.57	706.7	709.15	227.9	187.1	225.9	38.8	2	NA
9801	12/3/1998	Cow Run	RWL	2071580.02	349642.02	609.77	611.37	130.00	109.4	129	19.6	2	PVC SCH 40
9802	12/2/1998	Alluvium	RWL	2071555.02	349857.02	610.39	612.39	51.1	39	49.1	10.1	2	PVC SCH 40
9806	12/29/1998	Morgantown	RWL	2071860.03	349092.02	718.29	720.29	142	111	140	29	2	PVC SCH 40
9910	8/4/1999	Morgantown	FAR	2069464.98	352217.01	NA	697.07	102.07	57.07	102.07	45	2	PVC SCH 80
93100	7/20/1994	Cow Run	RWL	2071823.04	345135.01	612.00	614.04	114.29	73.35	112.25	38.9	2	PVC SCH 40
93108	8/10/1993	Morgantown	RWL	2072737.05	345345.02	716.72	718.48	151.66	129.9	149.9	20	2	PVC SCH 40
94136	9/8/1994	Cow Run	RWL	2073492.06	347074.03	594.00	596.25	120.75	79.4	118.5	39.1	2	PVC SCH 40
94137	9/7/1994	Alluvium	RWL	2073494.06	347070.03	594.00	596.27	55.17	44	52.9	8.9	2	PVC SCH 40
94139	7/21/1994	Morgantown	RWL	2071828.04	345135.01	612.00	614.11	62.26	41.25	60.15	18.9	2	PVC SCH 40
96152	6/25/1996	Morgantown	FAR	2067403.94	355388.99	777.28	779.44	168.16	127	166	39	2	PVC SCH 40
96153R	2/29/2016	Morgantown	FAR	2063762.89	355668.96	771.91	773.88	116.97	102	112	10	2	PVC SCH 80
96154R	3/3/2016	Morgantown	FAR	2064229.90	353220.96	736.25	738.21	101.86	86	96	10	2	PVC SCH 80
96156	1/3/1996	Morgantown	FAR	2061940.88	352363.94	851.81	854.2	224.49	220.1	222.1	2	1	PVC SCH 80
96157	11/21/1995	Alluvium	FAR	2070687.00	351151.01	584.6	586.52	48.63	37.7	46.7	9	2	PVC SCH 40
96158	11/29/1995	Cow Run	FAR	2070668.00	351145.01	584.7	586.5	60.96	50.2	59.2	9	2	PVC SCH 40
2016-03	3/23/2016	Morgantown	FAR	2069923.99	350764.01	659.06	650.94	56.05	42	52	10	2	PVC SCH 80
2016-04	3/28/2016	Cow Run	FAR	2069923.99	350773.01	658.98	649.36	137.06	123	133	10	2	PVC SCH 80
2016-05	3/29/2016	Morgantown	FAR	2070176.99	351823.01	648.70	650.97	58.27	44	54	10	2	PVC SCH 80
2016-06	3/29/2016	Cow Run	FAR	2070167.99	351825.01	649.02	651.1	126.08	112	122	10	2	PVC SCH 80
2016-07	3/29/2016	Morgantown	FAR	2068933.97	352440.00	728.84	731.45	107.61	93	103	10	2	PVC SCH 80
2016-08	3/23/2016	Cow Run	FAR	2068943.97	352440.00	728.84	731.38	196.54	182	192	10	2	PVC SCH 80
2016-09	3/3/2016	Cow Run	FAR	2064221.9	353215.96	736.83	739.22	191.39	177	187	10	2	PVC SCH 80
2016-10	3/4/2016	Cow Run	FAR	2064761.92	351103.96	864.62	866.97	311.35	294	304	10	2	PVC SCH 80
2016-11	3/4/2016	Morgantown	FAR	2064774.92	351096.96	864.51	866.88	260.37	245	255	10	2	PVC SCH 80
2018-01	12/5/2018	Cow Run	RWL	2072876.05	345335.88	735	735.781	260.00	235	255.5	20.5	2	PVC SCH 40
2018-02	10/24/2018	Morgantown	RWL	2073262.43	345715.60	755	757.316	195.00	182.5	194.5	12	2	PVC SCH 40
2018-03	11/19/2018	Cow Run	RWL	2073732.79	346138.61	707	708.807	226.00	197.8	221.5	23.7	2	PVC SCH 40
2018-04	11/1/2018	Morgantown	RWL	2073732.35	346148.53	707	708.182	137.5	124	134	10	2	PVC SCH 40
2019-02	2/20/2020	Morgantown	RWL	2070306.50	345958.13	739.55	742.347	178	158	178	20	2	PVC SCH 40
2019-06	1/28/2020	Morgantown	RWL	2068790.41	347858.46	813.07	815.915	224	194	224	30	2	PVC SCH 40
2019-07	1/20/2020	Cow Run	RWL	2068786.90	347861.86	812.91	815.91	270	250	270	20	2	PVC SCH 40
2019-09	11/26/2019	Cow Run	RWL	2067834.23	349146.48	747.77	750.767	220	200	220	20	2	PVC SCH 40
MW-16	10/5/2016	Morgantown	RWL	2070971.09	350029.07	727.96	730.76	121.4	109	119	10	2	PVC SCH 40
MW-17	10/3/2016	Cow Run	RWL	2070971.09	350029.07	727.73	730.64	215.4	203	213	10	2	PVC SCH 40
MW-20	5/8/2012	Cow Run	FAR	2063789.89	355701.96	771.80	774.3	222.5	210	220	10	2	PVC SCH 80

Appendix A
Well Construction Details
Gavin Residual Waste Landfill and Fly Ash Reservoir
Cheshire, OH

Privileged and Confidential
Attorney-Client Communication
Attorney Work Product
Prepared at the Request of Counsel

Well ID	Boring Completion Date	Hydrogeologic Unit	Site Area	Latitude	Longitude	Top of Borehole Elevation (ft)	Top of Casing Elevation (ft)	Total Well Depth (ft bgs)	Screen Start Depth (ft bgs)	Screen End Depth (ft bgs)	Screen Length (ft)	Well Diameter (in)	Screen Material
2022 Replacement Monitoring Wells													
2022-14	7/24/2022	Morgantown	RWL	2070349.795	345975.5035	740.42	743.04	180.00	158	178	20	2	PVC SCH 40
2022-15	8/5/2022	Cow Run	FAR	2068926.25	352451.0853	729.55	732.09	194.00	182	192	10	2	PVC SCH 40
2022-16	8/9/2022	Cow Run	FAR	2064228.927	353206.6888	736.19	738.37	189.00	177	187	10	2	PVC SCH 40
2022-17	9/14/2022	Cow Run	RWL	2072913.835	345353.3472	733.39	735.83	257.00	235	255	20	2	PVC SCH 40
2022-18	8/18/2022	Morgantown	FAR	2061913.471	352327.0836	852.04	854.41	211.00	199	209	10	2	PVC SCH 40
2022-19	7/26/2022	Cow Run	RWL	2072997.258	348497.3409	613.58	616.04	119.00	107	117	10	2	PVC SCH 40
2025 Replacement Monitoring Wells													
2025-01	2/22/2025	Morgantown	RWL	2069965.229	350704.9594	645.63	650.502	40.00	28	38	10	2	PVC SCH 80
2025-03*	11/8/2025	Morgantown	FAR	2063762	355668	771	773	143.00	126	141	15	2	PVC SCH 40

Notes: Datum is SP/NAD83/NGVD29.

For lithology at well 2003, see the boring log for well 2002.

ft = feet; in = inches; bgs = below ground surface; NA = not available

** = Latitude/longitude, top of borehole elevation, and top of casing elevation for monitoring well 2025-03 are preliminary. The well is scheduled to be surveyed in Q1 2026.*

APPENDIX B BORING AND WELL CONSTRUCTION LOGS

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER

COMPANY **OHIO POWER COMPANY**

PROJECT **GAVIN PLANT FLY ASH POND CLOSURE**

COORDINATES **N 351,118.0 E 2,070,648.6**

GROUND ELEVATION **584.6** SYSTEM **STATE PLANE**

WATER LEVEL	▽ 38.6	▽	▽
TIME			
DATE	11-21-95		

BORING NO. **96157** DATE SHEET **1** OF **1**

BORING START **11/20/95** BORING FINISH **11/21/95**

PIEZOMETER TYPE WELL TYPE **OW**

HGT. RISER ABOVE GROUND **1.93** DIA **2.0**

DEPTH TO TOP OF WELL SCREEN **37.7** BOTTOM **46.7**

WELL DEVELOPMENT **YES** BACKFILL **QUICK GROUT**

FIELD PARTY **TJH-REB** RIG **CME-75**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPH LOG	USCS	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
1	SS	2.5	4.0	5-7-9	1.1							38.6 SWL over nite. 7.2 SWL 12-3-96.
2	SS	7.5	9.0	2-4-4	1.2		5		CL	**BROWN AND RED SILTY CLAY** Moist.		Latitude 38 57 48.52170 N. = Longitude 082 08 26.71347 W.
3	SS	12.5	14.0	2-3-5	1.1		10		SM	**BROWN SILTY SAND** Wet.		
4	SS	17.5	18.7	6-8-10	1.3		15		CL	**GRAY SILTY CLAY** Moist.		
5	SS	22.5	24.0	6-12-18	1.0		20			**GRAY CLAY** Moist.		
6	SS	27.5	29.0	4-6-9	1.1		25			**REDDISH BROWN CLAY** Wet.		26.7 Top of seal.
7	SS	32.5	34.0	4-6-8	1.0		30			**GRAY SILTY CLAY** Wet with rock fragments.		31.2 Top of sand.
8	SS	37.5	39.0	4-7-9	1.2		35		SP	**BROWN SAND** Saturated, fine grain.		37.5 Top of screen.
9	SS	42.5	44.0	4-7-10	1.2		40		CL	**GRAY CLAY** Moist.		
10	SS	47.5	48.0	77	?		45			**GRAY SANDY CLAY** Wet.		46.7 Bottom of screen 47.8 Bottom of sand.
										GRAY CLAY SHALE Dry.		

TYPE OF CASING USED

	NQ-2 ROCK CORE
X	6" x 3.25 HSA
	9" x 6.25 HSA
	HW CASING ADVANCER 4"
	NW CASING 3"
	SW CASING 6"

PIEZOMETER TYPE: PT = OPEN TUBE POROUS TIP, SS = OPEN TUBE SLOTTED SCREEN, G = GEONOR, P = PNEUMATIC

WELL TYPE: OW = OPEN TUBE SLOTTED SCREEN, GM = GEOMON

RECORDER **REB**

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER

COMPANY **OHIO POWER COMPANY**

PROJECT **GAVIN PLANT FLY ASH POND CLOSURE**

COORDINATES **N 351,115.0 E 2,070,634.8**

GROUND ELEVATION **584.7** SYSTEM **STATE PLANE**

WATER LEVEL	▽ 7.3	▼	▼
TIME			
DATE	11-29-95		

BORING NO. **96158** DATE SHEET **1** OF **2**

BORING START **11/27/95** BORING FINISH **11/29/95**

PIEZOMETER TYPE WELL TYPE **OW**

HGT. RISER ABOVE GROUND **1.76** DIA **2.0**

DEPTH TO TOP OF WELL SCREEN **50.2** BOTTOM **59.2**

WELL DEVELOPMENT **YES** BACKFILL **QUICK GROUT**

FIELD PARTY **TJH-WEB** RIG **CME-75**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPH LOG	USCS	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
							5		CL	**BROWN AND RED SILTY CLAY** Moist.		Latitude 38 57 48.49213 N. = Longitude 082 08 26.88801 W.
							10		SM	**BROWN SILTY SAND** Wet.		
							15		CL	**GRAY SILTY CLAY** Moist.		
							20			**GRAY CLAY** Moist.		
							25			**REDDISH BROWN CLAY** Wet.		
							30			**GRAY SILTY CLAY** Wet with rock fragments.		
							35		SP	**BROWN SAND** Saturated, fine grain.		
							40		CL	**GRAY CLAY** Moist.		
							45			**GRAY SANDY CLAY** Wet.		46.0 Top of seal.
1	NQ	47.5	49.5		1.4	40				**GRAY SANDY CLAYSHALE** **GRAY SHALEY SANDSTONE** Hard.		48.5 Top of sand.

Continued Next Page

TYPE OF CASING USED

X	NQ-2 ROCK CORE	
	6" x 3.25 HSA	
X	9" x 6.25 HSA	
	HW CASING ADVANCER	4"
	NW CASING	3"
	SW CASING	6"

PIEZOMETER TYPE: PT = OPEN TUBE POROUS TIP, SS = OPEN TUBE SLOTTED SCREEN, G = GEONOR, P = PNEUMATIC

WELL TYPE: OW = OPEN TUBE SLOTTED SCREEN, GM = GEOMON

RECORDER **WEB**

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER

COMPANY **OHIO POWER COMPANY**

BORING NO. **96158** DATE SHEET **2** OF **2**

PROJECT **GAVIN PLANT FLY ASH POND CLOSURE**

BORING START **11/27/95** BORING FINISH **11/29/95**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPH LOG	USCS	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
2	NQ	49.5	55.3		5.6	62	55			**GRAY CLAY SHAEL** Hard, except of 2 small sandstone lenses between 50' and 51' and soft shale layers from 51.7 and 52.4.		50.2 Top of screen.
3	NQ	55.3	60.3		5.0	62	60			**GRAY CLAY SHALE** Hard.		59.2 Bottom of screen. 61.3 Bottom of sand.

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

MONITORING WELL CONSTRUCTION

JOB NUMBER _____

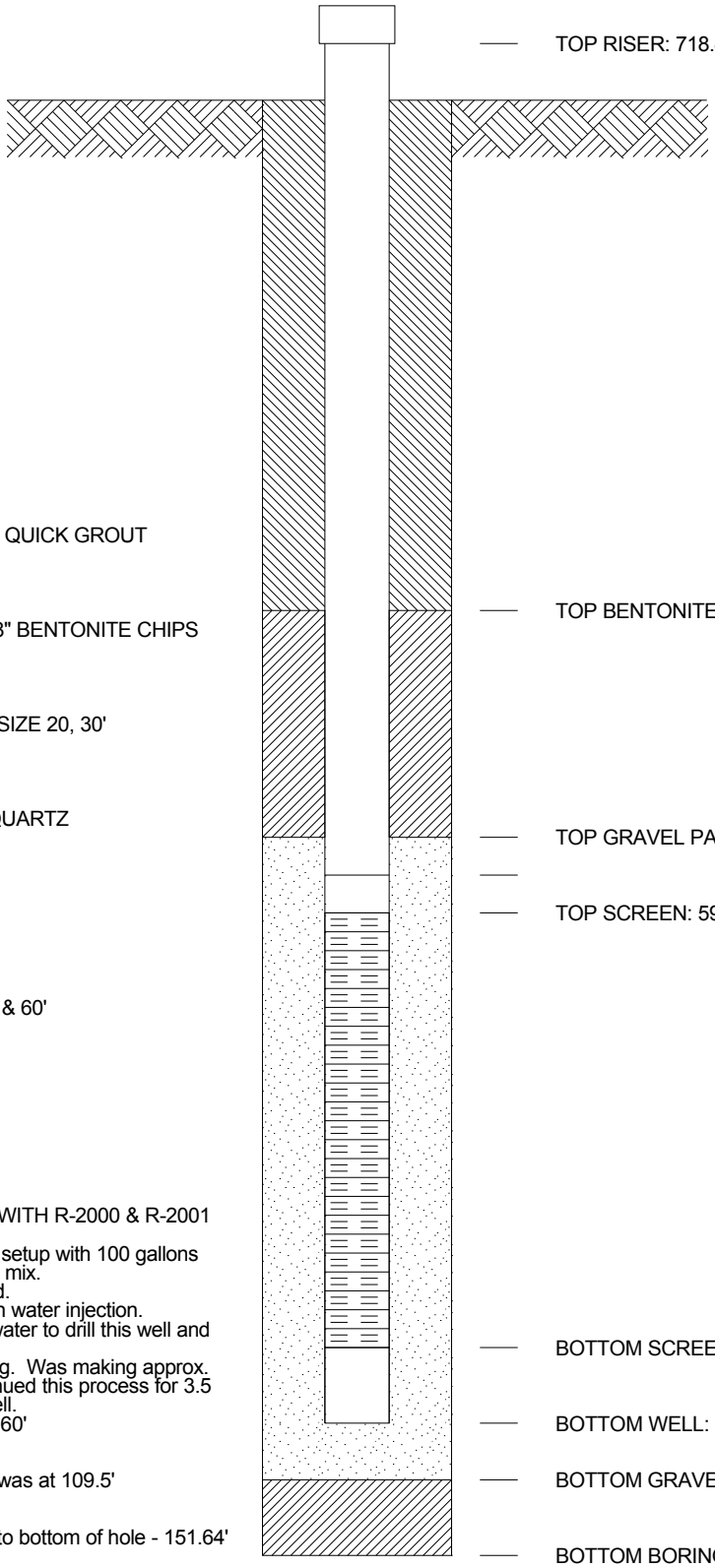
COMPANY _____ WELL No. **R-2000** BORING No. **R-2000** INSTALLED **2/10/00**

PROJECT **GAVIN FGD CONVERSION PROJECT**

COORDINATES **N 348,126.9 E 2,104,157.6**

SYSTEM **State Plane using NADA27**

GROUND ELEVATION 716.68 FT.



GROUT SEAL: 250 GALLONS QUICK GROUT

BENTONITE SEAL: 150 lbs 3/8" BENTONITE CHIPS

SCREEN: 2" dia., PVC, SLOT SIZE 20, 30'

GRAVEL PACK: 1050 lbs #4 QUARTZ

RISER PIPE: 2", dia., PVC

SPACERS, DEPTH: 130', 115' & 60'

Notes:
THIS IS A CLUSTERED SITE WITH R-2000 & R-2001

Deconned rig and tools prior to setup with 100 gallons potable water and alconox mix.
Water source was G-5 belthead.
Used 8" downhole hammer with water injection.
Used approx. 1500 gallons of water to drill this well and flush clean.
Used compressor to flush boring. Was making approx. 12 gallons/minute. Continued this process for 3.5 hours prior to installing well.
Spider spacers at 130', 115', & 60'
Seal hydrated by drill crew.

SWL at installation on 2/17/00 was at 109.5'
SWL at 129.2' on 2/23/00

Measurement from top of pipe to bottom of hole - 151.64'

GEOMCNST R1R2.GPJ AEP.GDT 11/24/10

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER

COMPANY AMERICAN ELECTRIC POWER

PROJECT GAVIN LANDFILL

COORDINATES N 348,126.9 E 2,104,157.6

GROUND ELEVATION 716.7 SYSTEM State Plane using NADA27

WATER LEVEL	▽	▼	▼
TIME			
DATE			

BORING NO. R-2000 DATE 7/14/00 SHEET 1 OF 4

BORING START 1/18/00 BORING FINISH 2/10/00

PIEZOMETER TYPE SS WELL TYPE OW

HGT. RISER ABOVE GROUND 1.75 DIA 2"

DEPTH TO TOP OF WELL SCREEN 119.6 BOTTOM 148.6

WELL DEVELOPMENT BACKFILL

FIELD PARTY TJH/REB RIG CME-75

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	USCS	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
1	SS	2.7	4.2	4-6-10	1.3		5		SP	BROWN FINE GRAIN SAND Fill Material, Dry		
2	SS	7.7	9.2	5-8-11	1.4		10		CL	GRAY SILTY CLAY Fill Material, Dry		
3	SS	12.7	14.2	10-12-18	1.3		15			DARK GRAY WEATHERED CLAY SHALE Fill Material		
4	SS	17.7	18.2	50/.5	0.5	0				GRAY WEATHERED CLAY SHALE Random Fill, Dry		Auger refusal at 18.3'; started coring.
5	NQ-2	18.3	20.0		0.6		20			N5 MEDIUM GRAY LIMESTONE Broken up		
6	NQ-2	20.0	25.0		5.0	68				N6 MEDIUM LIGHT GRAY WEATHERED CLAY SHALE With limestone nodules		
7	NQ-2	25.0	32.7		2.5	72	25					
8	NQ-2	32.7	35.0		1.9	37	30			RED & GRAY CLAY SHALE		
9	NQ-2	35.0	40.0		3.9	77	35			N6 MEDIUM LIGHT GRAY SHALE		
10	NQ-2	40.0	45.0		5.0	74	40			N6 MEDIUM LIGHT GRAY SANDY SHALE		
11	NQ-2	45.0	50.0		4.5	44	45			N6 MEDIUM LIGHT GRAY CLAY SHALE N6 MEDIUM LIGHT GRAY SANDY SHALE N6 MEDIUM LIGHT GRAY CLAY SHALE N6 MEDIUM LIGHT GRAY SANDY SHALE Vertical crack & iron stain 44.0'-44.8' N6 MEDIUM LIGHT GRAY CLAY SHALE N6 MEDIUM LIGHT GRAY SANDY SHALE		

Continued Next Page

JT 7/14/00

AEP GAVINLF.GPJ

TYPE OF CASING USED

X	NQ-2 ROCK CORE	
X	6" x 3.25 HSA	
	9" x 6.25 HSA	
	HW CASING ADVANCER	4"
	NW CASING	3"
	SW CASING	6"
	AIR HAMMER	8"

PIEZOMETER TYPE: PT = OPEN TUBE POROUS TIP, SS = OPEN TUBE SLOTTED SCREEN, G = GEONOR, P = PNEUMATIC

WELL TYPE: OW = OPEN TUBE SLOTTED SCREEN, GM = GEOMON

RECORDER REB

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER _____

COMPANY AMERICAN ELECTRIC POWER

PROJECT GAVIN LANDFILL

BORING NO. R-2000 DATE 7/14/00 SHEET 2 OF 4

BORING START 1/18/00 BORING FINISH 2/10/00

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	USCS	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
12	NQ-2	50.0	55.0		3.0	0				Vertical crack, iron stain and partial water loss at 49.0'		Drill tool malfunction
										RED & GRAY CLAY SHALE		
13	NQ-2	55.0	60.0		3.5	0	55			5R 4/2 GRAYISH RED CLAY SHALE		
14	NQ-2	60.0	65.0		4.7	77	60					
										N6 MEDIUM LIGHT GRAY SANDY SHALE		
15	NQ-2	65.0	70.0		4.9	61	65			N6 MEDIUM LIGHT GRAY SANDSTONE Shaley		At 65', cored into a loose sand with some pore pressure (flushing boring)
										N6 MEDIUM LIGHT GRAY CLAY SHALE		
16	NQ-2	70.0	75.0		4.2	29	70			RED & GRAY CLAY SHALE		No water return
17	NQ-2	75.0	85.0		9.2	50	75			N6 MEDIUM LIGHT GRAY WEATHERED CLAY SHALE Badly broken		
							80			5GY 4/1 DARK GREENISH GRAY CLAY SHALE Not weathered		
										REDDISH to MULTI COLORED CLAY SHALE		
18	NQ-2	85.0	94.5		5.6	48	85			5R 4/2 GRAYISH RED SHALE With limestone nodules throughout		
							90					
19	NQ-2	94.7	100.0		4.2	50	95			5R 4/2 GRAYISH RED SHALE Weathered & broken		
20	NQ-2	100.0	105.0		2.7	0	100					
21	NQ-2	105.0	110.0		3.9	31	105			5R 4/2 GRAYISH RED CLAYSTONE Broken, but hard in places		No water return
22	NQ-2	110.0	115.0		5.0	42	110			HARD REDDISH to MULTI COLORED CLAY SHALE Limestone nodules throughout		

Continued Next Page

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER _____

COMPANY AMERICAN ELECTRIC POWER

PROJECT GAVIN LANDFILL

BORING NO. R-2000 DATE 7/14/00 SHEET 3 OF 4

BORING START 1/18/00 BORING FINISH 2/10/00

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	USCS	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
23	NQ-2	115.0	125.0		10.0	50				5R 4/2 GRAYISH RED CLAYSTONE N6 MEDIUM LIGHT GRAY SANDY SHALE Morgantown 5R 4/2 GRAYISH RED SHALE With limestone nodules and red claystone		
							120					
24	NQ-2	125.0	135.0		10.0	78	125			5R 4/2 GRAYISH RED CLAYSTONE		
							130			N6 MEDIUM LIGHT GRAY SANDY SHALE (132.7'-134.1' Morgantown)		
25	NQ-2	135.0	138.9		3.9	50	135			N6 MEDIUM LIGHT GRAY CLAY SHALE 5R 4/2 GRAYISH RED CLAYSTONE		No water return
26	NQ-2	138.9	145.0		6.0	70				N6 MEDIUM LIGHT GRAY LIMESTONE		
							140			N6 MEDIUM LIGHT GRAY CLAY SHALE Medium hardness		
27	NQ-2	145.0	148.3		2.9	17	145			5R 4/2 GRAYISH RED CLAYSTONE		
28	NQ-2	148.3	155.0		5.5	27				5R 4/2 GRAYISH RED CLAYSTONE With limestone nodules & lenses throughout		
							150					
29	NQ-2	155.0	160.0		3.6	19	155			RED & BROWN SHALE Badly broken		No water return
30	NQ-2	160.0	165.0		3.1	0	160			5R 4/2 GRAYISH RED CLAY SHALE Broken up		SWL at 119.7' on 2/7/00; static over weekend
31	NQ-2	165.0	170.0		2.0	0	165			RED, BROWN & GRAY (MULTI COLORED) CLAYSTONE		Pulled rods, pumped hole full with Quick grout, trying to keep rods from chattering.
32	NQ-2	170.0	175.0		4.2	55	170			5R 4/2 GRAYISH RED CLAYSTONE N5 MEDIUM GRAY CLAYSTONE		No water return
33	NQ-2	175.0	180.0		5.0	30	175			N5 MEDIUM GRAY CLAY SHALE With limestone nodules		

Continued Next Page

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER _____

COMPANY AMERICAN ELECTRIC POWER

PROJECT GAVIN LANDFILL

BORING NO. R-2000 DATE 7/14/00 SHEET 4 OF 4

BORING START 1/18/00 BORING FINISH 2/10/00

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	USCS	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
34	NQ-2	180.0	185.0		2.5	44				RED & GRAY CLAY SHALE Limestone nodules		
35	NQ-2	185.0	190.0		4.2	0	185			5R 3/4 DUSKY RED CLAY SHALE Badly broken		
36	NQ-2	190.0	195.0				190			RED & GRAY CLAY SHALE		SWL at 61.5' on 2/9/2000 No water return
										N5 MEDIUM GRAY SANDY CLAY SHALE Limestone nodules		
37	NQ-2	195.0	200.0		5.0	84	195			N5 MEDIUM GRAY CLAY SHALE Hard		
38	NQ-2	200.0	210.0		9.0	91	200					No water return
							205					
39	NQ-2	210.0	215.0		5.0	60	210					
40	NQ-2	215.0	217.4		1.4	64	215					
41	NQ-2	217.4	219.0		1.6	75			CL	CLAY SEAM at 217.0'-217.3'		
42	NQ-2	219.0	224.0		4.0	23	220		CL	CLAY SEAM at 218.8'-219.0'		
										RED, GRAY & BROWN CLAY SHALE		Bottom of boring at 224.0' Used approx. 6000 gallons of water to core this boring.

AEP GAVINLF.GPJ AEP.GDT 7/14/00

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER

COMPANY

PROJECT **GAVIN FGD CONVERSION PROJECT**

COORDINATES **N 348,513.9 E 2,103,918.7**

GROUND ELEVATION **724.2** SYSTEM **State Plane using NADA27**

Water Level, ft	▽	▼	▼
TIME			
DATE			

BORING NO. **R-2002** DATE **11/24/10** SHEET **1** OF **10**

BORING START **2/7/00** BORING FINISH **2/19/00**

PIEZOMETER TYPE **SS** WELL TYPE **OW**

HGT. RISER ABOVE GROUND **1.85** DIA **2"**

DEPTH TO TOP OF WELL SCREEN **193.6** BOTTOM **232.6**

WELL DEVELOPMENT BACKFILL

FIELD PARTY **MCR/PK** RIG **BK-81**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
1	SS	1.7	3.2	6-7-8	1.4				SP	**LIGHT BROWN FINE to MEDIUM GRAIN SAND** With some 1/2" size fragments, dry		Deconned rig and tools at G-5 belt head using Leading Creek potable water and liqui-nox before drilling. Used Leading Creek potable water for drilling.
2	SS	6.7	8.2	5-6-6	1.5		5					
3	SS	11.7	13.2	13-13-15	1.4		10		SP	**GRAY to BROWN MEDIUM GRAIN SANDSTONE FRAGMENTS** Dry		
4	SS	16.7	18.2	7-8-10	1.5		15		SP	**BROWN FINE to MEDIUM GRAIN SAND** Dry		

TYPE OF CASING USED

X	NQ-2 ROCK CORE	
X	6" x 3.25 HSA	
	9" x 6.25 HSA	
	HW CASING ADVANCER	4"
	NW CASING	3"
	SW CASING	6"
	AIR HAMMER	8"

Continued Next Page

PIEZOMETER TYPE: PT = OPEN TUBE POROUS TIP, SS = OPEN TUBE SLOTTED SCREEN, G = GEONOR, P = PNEUMATIC

WELL TYPE: OW = OPEN TUBE SLOTTED SCREEN, GM = GEOMON

RECORDER **MCR**

AEP R1R2.GPJ AEP.GDT 11/24/10

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER _____

COMPANY _____ BORING NO. **R-2002** DATE **11/24/10** SHEET **2** OF **10**

PROJECT **GAVIN FGD CONVERSION PROJECT** BORING START **2/7/00** BORING FINISH **2/19/00**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
5	SS	21.7	23.2	8-10-9	1.4		25		SP	**GRAY to BROWN FINE to MEDIUM GRAIN SAND** With approx 50% of sample being fragments, dry		
6	SS	26.7	28.2	6-7-30	1.5				SP	**GRAY FINE to MEDIUM GRAIN SAND** Some brown, with approx 50% of sample being fragments, dry		
7	SS	31.7	33.2	10-11-14	1.4		30					
8	SS	36.7	38.2	16-22-22	1.4		35					
9	SS	41.7	43.2	9-21-32	1.5		40		SP	**LIGHT to MEDIUM BROWN MEDIUM GRAIN SANDSTONE FRAGMENTS** With fine grain sand layers		
10	SS	44.1	45.6	8-8-11	1.5		45			**BROWN STIFF CLAY with COAL, SANDSTONE FRAGMENTS, & GRAVEL MINE SPOIL** Dry		Started adding drilling mud inside of augers at 43.2' to help with drilling.

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AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER _____

COMPANY _____ BORING NO. **R-2002** DATE **11/24/10** SHEET **3** OF **10**

PROJECT **GAVIN FGD CONVERSION PROJECT** BORING START **2/7/00** BORING FINISH **2/19/00**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
11	SS	46.7	48.2	8-9-12	1.5							
12	SS	51.7	53.2	9-11-10	1.5		50					
13	SS	56.7	58.2	8-12-11	1.5		55					
14	SS	61.7	63.2	9-13-19	1.5		60		CL	**RED SHALEY CLAY**		
15	SS	66.7	67.4	28-50/.2	0.6		65			**RED CLAY SHALE**		
16	SS	68.9	69.0	50/0	0	63				**10YR 7/4 GRAYISH ORANGE CLAY SHALE** Soft		Drilling to this point was using 6.25"HSA. Pulled HSA's and installed 6" SW casing. Cleaned inside of casing with 6" roller bit.
17	NQ-2	69.0	74.8		6.2		70			**N7 LIGHT GRAY FINE GRAIN SANDSTONE** Hard		

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AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER

COMPANY

BORING NO. **R-2002** DATE **11/24/10** SHEET **4** OF **10**

PROJECT **GAVIN FGD CONVERSION PROJECT** BORING START **2/7/00** BORING FINISH **2/19/00**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
										10R 6/2 PALE RED CLAY SHALE		
18	NQ-2	74.8	79.8		3.6	33	75			**10R 5/4 PALE REDDISH BROWN CLAY SHALE**		
										N6 MEDIUM LIGHT GRAY CLAY SHALE		
19	NQ-2	79.8	84.8		5.8	78	80			**5B 7/1 LIGHT BLUISH GRAY CLAY SHALE**		
										5G 6/1 GREENISH GRAY CLAY SHALE		
20	NQ-2	84.8	90.8		6.5	66	85			**10YR 6/2 PALE OLIVE CLAY SHALE** Medium hard		SWL at 9.8' on 2/15/00 at 7:30AM; NQ hole depth at 84.8'
										10R 6/2 PALE RED CLAY SHALE Medium to hard		
21	NQ-2	90.8	94.8		1.7	24	90			**10R 6/2 PALE RED CLAY SHALE** Soft to medium hard		
22	NQ-2	94.8	97.3		1.0	60	95					
23	NQ-2	97.3	98.3		0.6	0						

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AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER

COMPANY

BORING NO. **R-2002** DATE **11/24/10** SHEET **5** OF **10**

PROJECT **GAVIN FGD CONVERSION PROJECT** BORING START **2/7/00** BORING FINISH **2/19/00**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
24	NQ-2	98.3	103.3		1.0	0						Used 2000 gallons of water to this point - 98.3'
							100					
25	NQ-2	103.3	108.3		4.2	95						
							105					
26	NQ-2	108.3	114.8		7.1	76						
							110					
27	NQ-2	114.8	117.8		3.0	80	115			**10R 6/2 PALE RED CLAY SHALE** Soft to medium hard, slightly weathered		
28	NQ-2	117.8	125.0		7.4	9				**CLAY SHALE** Badly broken, medium hard		SWL at 16.8' on 2/16/00 at 7:30 am; NQ hole to 117.8'
							120					
										SILTY FINE GRAIN SANDSTONE Hard		
										5R 6/2 PALE RED CLAY SHALE Medium hard, badly broken		

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AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER _____

COMPANY _____ BORING NO. **R-2002** DATE **11/24/10** SHEET **6** OF **10**

PROJECT **GAVIN FGD CONVERSION PROJECT** BORING START **2/7/00** BORING FINISH **2/19/00**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
							125					
29	NQ-2	125.0	130.0		4.5	56				**5R 5/4 MODERATE RED CLAY SHALE**		
										N7 LIGHT GRAY CLAY SHALE		
30	NQ-2	130.0	140.0		9.6	22	130			**5R 5/4 MODERATE RED CLAY SHALE** Medium to hard		
										5B 7/1 GRAY SILTY CLAY SHALE		
							135			**REDDISH CLAY SHALE** Medium to hard		
										GRAY SILTY CLAY SHALE Hard		
31	NQ-2	140.0	145.0		4.7	55	140			**5B 7/1 LIGHT BLUISH GRAY FINE GRAIN SILTY SANDSTONE**		
										5R 5/4 MODERATE RED CLAY SHALE		
32	NQ-2	145.0	155.0		8.8	15	145					Used 5000 gallons of water to this point - 145'
										5B 7/1 LIGHT BLUISH GRAY CLAY SHALE Medium hard		

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AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER _____

COMPANY _____ BORING NO. **R-2002** DATE **11/24/10** SHEET **7** OF **10**

PROJECT **GAVIN FGD CONVERSION PROJECT** BORING START **2/7/00** BORING FINISH **2/19/00**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
							155					
33	NQ-2	155.0	159.0		4.6	61				**5R 5/4 MODERATE RED CLAY SHALE** Medium hard		
34	NQ-2	159.0	165.0		5.0	36	160			**5Y 5/2 LIGHT OLIVE GRAY CLAY SHALE** Soft		
							165					
35	NQ-2	165.0	170.0		4.8	17				**5R 6/2 PALE RED CLAY SHALE** Soft		
36	NQ-2	170.0	174.0		2.9	28	170			**5R 5/4 MODERATE RED CLAY SHALE** Soft		
37	NQ-2	174.0	180.0		5.1	55	175					

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AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER _____

COMPANY _____ BORING NO. **R-2002** DATE **11/24/10** SHEET **8** OF **10**

PROJECT **GAVIN FGD CONVERSION PROJECT** BORING START **2/7/00** BORING FINISH **2/19/00**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
							180					
38	NQ-2	180.0	190.0		9.7	29				**10R 6/2 PALE RED CLAY SHALE** Hard		
							185					
										5B 7/1 LIGHT BLUISH GRAY CLAY SHALE Hard		
										10R 6/2 PALE RED CLAY SHALE Hard		
39	NQ-2	190.0	196.5		5.3	58	190			**10R 6/2 PALE RED CLAY SHALE** Soft		
							195					
40	NQ-2	196.5	205.0		8.2	56						
										5B 5/1 MEDIUM BLUISH GRAY FINE GRAIN SANDY SILTSTONE Hard		
							200					

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AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER

COMPANY

BORING NO. **R-2002** DATE **11/24/10** SHEET **9** OF **10**

PROJECT **GAVIN FGD CONVERSION PROJECT** BORING START **2/7/00** BORING FINISH **2/19/00**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
							205					
41	NQ-2	205.0	213.5		8.4	81						SWL at 18.7' on 2/19/00 at 7:30am - NQ hole to 205'
							210					
42	NQ-2	213.5	223.5		10	76						
							215					
							220					
43	NQ-2	223.5	233.5		9.9	69						
							225					

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AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER _____

COMPANY _____ BORING NO. **R-2002** DATE **11/24/10** SHEET **10** OF **10**

PROJECT **GAVIN FGD CONVERSION PROJECT** BORING START **2/7/00** BORING FINISH **2/19/00**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
								× × × ×				
										10R 4/6 MODERATE REDDISH BROWN CLAY SHALE Medium hard		
							230					Stopped boring at 233.5' on 2/19/00. Used approx. 10,000 gallons of water to drill hole. Monitoring well to be installed at a later date.

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

MONITORING WELL CONSTRUCTION

JOB NUMBER _____

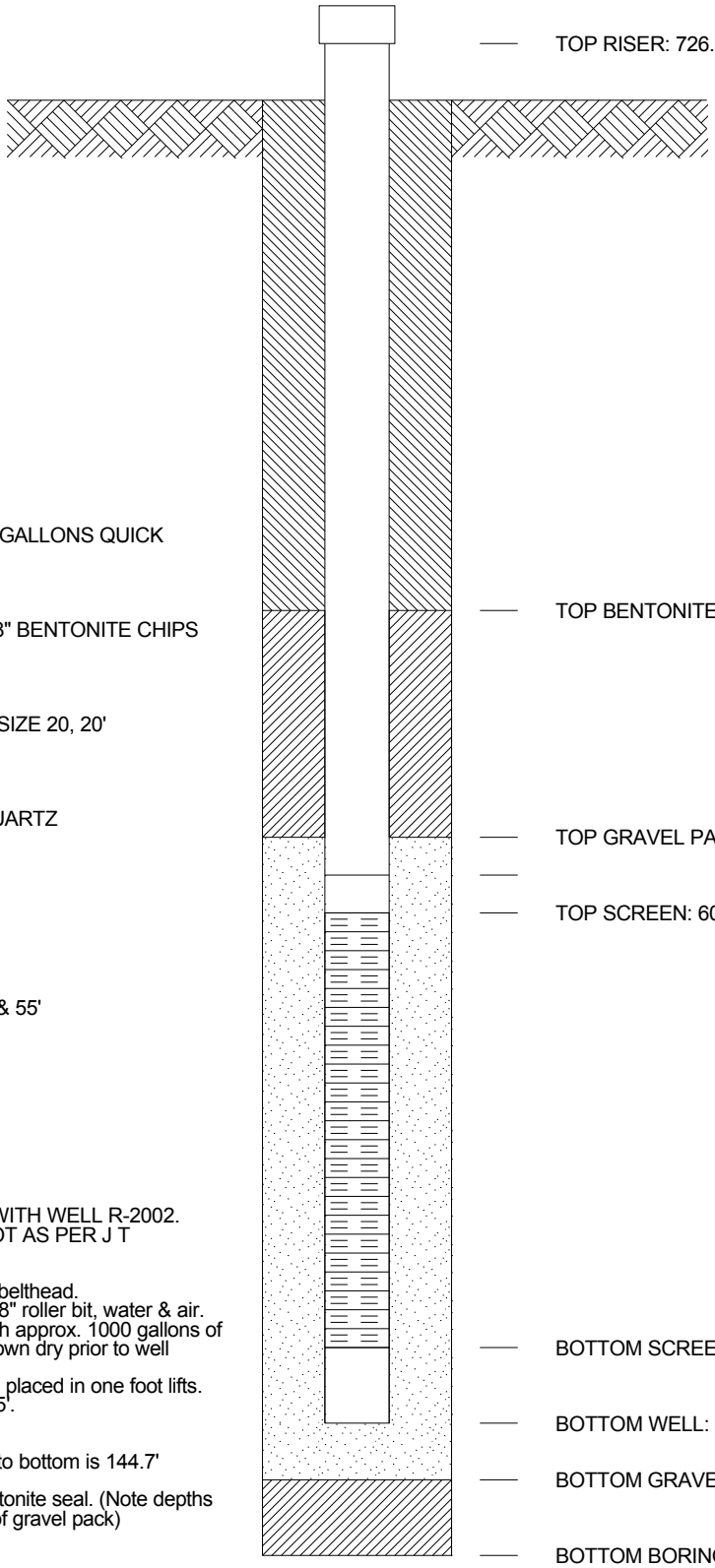
COMPANY _____ WELL No. **R-2003** BORING No. **R-2003** INSTALLED **3/7/00**

PROJECT **GAVIN FGD CONVERSION PROJECT**

COORDINATES **N 348,517.2 E 2,103,917.1**

SYSTEM **State Plane using NADA27**

GROUND ELEVATION 724.28 FT.



GROUT SEAL: APPROX. 200 GALLONS QUICK GROUT

BENTONITE SEAL: 100 lbs 3/8" BENTONITE CHIPS

SCREEN: 2" dia., PVC, SLOT SIZE 20, 20'

GRAVEL PACK: 550 lbs #4 QUARTZ

RISER PIPE: 2", dia., PVC

SPACERS, DEPTH: 135', 85', & 55'

Notes:
THIS WELL IS CLUSTERED WITH WELL R-2002.
THIS INSTALLATION WAS NOT AS PER J T MASSEY-NORTON

Potable water supply from G-5 belthead.
This well was drilled with a 5 7/8" roller bit, water & air.
The well boring was flushed with approx. 1000 gallons of potable water and then blown dry prior to well installation.
Bentonite seal was hydrated as placed in one foot lifts.
Spider spacers at 135', 85' & 55'.

SWL at installation was at 142'
Measurement from top of pipe to bottom is 144.7'

**5.3' of screen exposed to bentonite seal. (Note depths on top of screen and top of gravel pack)

GEOMCNST R1R2.GPJ AEP.GDT 11/24/10

ERM
1 Beacon Street; 5th Floor
Boston, MA 02108
Telephone: +1 (617) 646-7800

WELL 2018-01

Client: Gavin Power, LLC
Project Name: Residual Waste Landfill Monitoring Well Installation
Project Number: 0472342
Project Location: Cheshire, OH

DATE STARTED: 11/27/2018
DATE COMPLETED: 12/5/2018
DRILLING CONTRACTOR: Terracon
DRILLING METHODS: Mud Rotary/ Rock Coring
LOGGED BY: R. Baisden
CHECKED BY: H. Usle
NOTES: Additional drilling and formation water removed during drawdown test prior to well installation.

TOTAL DEPTH: 260 feet bgs
DIAMETER: 4 inches
GROUND ELEVATION: 735 feet amsl (approx.)
PVC ELEVATION: 735.78 feet amsl
NORTHING: 345328.751
EASTING: 2104378.726

WELL DEVELOPMENT
METHOD(S): Pump
DATE STARTED: 03/01/2019
DATE ENDED: 09/05/2019
DTW AT START: NM
DTW AT END: NM
VOLUME PURGED: 90 gallons

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
5	730				CL-ML		Dark Brown, CLAY AND SILT, fine-grained.	
10	725	MR	NA				10.0	NM
15	720							
20	715							
25	710						BEDROCK observed in drill cuttings.	
30	705	MR	NA					NM
35	700							

WELL DIAGRAM

- Concrete Pad and 6" Aluminum Stickup Protective Casing
- Well Riser (to 235 feet bgs) (2" SCH 40 PVC)
- Bentonite Grout Seal

SAMPLE TYPE

- Mud Rotary
- Wireline Rock Coring

GRAPHIC LOG LEGEND

- Silty Clay
- Bedrock
- Mudstone
- Sandstone
- Siltstone

ACRONYM LEGEND

amsl = above mean sea level
bgs = below ground surface
DTW = depth to water
NA = not applicable
NM = not measured
NR = no recovery
PID = photoionization detector
ppm = parts per million
PVC = polyvinyl chloride

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Telephone: +1 (617) 646-7800

Client: Gavin Power, LLC **Project Name:** Residual Waste Landfill Monitoring Well Installation

Project Number: 0472342 **Project Location:** Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)	WELL DIAGRAM
40	695								
45	690								
50	685	MR	NA				BEDROCK observed in drill cuttings. *(continued)*	NM	Well Riser (to 235 feet bgs) (2" SCH 40 PVC)
55	680								Bentonite Grout Seal
60	675								
65	670								
70	665	MR	NA					NM	
75	660								

SAMPLE TYPE

- Mud Rotary
- Wireline Rock Coring

GRAPHIC LOG LEGEND

- Silty Clay
- Bedrock
- Mudstone
- Sandstone
- Siltstone

ACRONYM LEGEND

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WELL 2018-01

Client: Gavin Power, LLC **Project Name:** Residual Waste Landfill Monitoring Well Installation

Project Number: 0472342 **Project Location:** Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)	WELL DIAGRAM
80	655								
85	650								
90	645	MR	NA				BEDROCK observed in drill cuttings. *(continued)*	NM	Well Riser (to 235 feet bgs) (2" SCH 40 PVC)
95	640								Bentonite Grout Seal
100	635								
105	630								
110	625	MR	NA					NM	
115	620								

SAMPLE TYPE

- Mud Rotary
- Wireline Rock Coring

GRAPHIC LOG LEGEND

- Silty Clay
- Bedrock
- Mudstone
- Sandstone
- Siltstone

ACRONYM LEGEND

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WELL 2018-01

Client: Gavin Power, LLC **Project Name:** Residual Waste Landfill Monitoring Well Installation

Project Number: 0472342 **Project Location:** Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)	WELL DIAGRAM
120	615								
125	610								
130	605	MR	NA					NM	
135	600						BEDROCK observed in drill cuttings. *(continued)*		Well Riser (to 235 feet bgs) (2" SCH 40 PVC)
140	595								Bentonite Grout Seal
145	590								
150	585	MR	NA					NM	
155	580								

SAMPLE TYPE

- Mud Rotary
- Wireline Rock Coring

GRAPHIC LOG LEGEND

- Silty Clay
- Bedrock
- Mudstone
- Sandstone
- Siltstone

ACRONYM LEGEND

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WELL 2018-01

Client: Gavin Power, LLC **Project Name:** Residual Waste Landfill Monitoring Well Installation

Project Number: 0472342 **Project Location:** Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)	WELL DIAGRAM
160	575								
165	570								Well Riser (to 235 feet bgs) (2" SCH 40 PVC)
170	565	MR	NA				BEDROCK observed in drill cuttings. *(continued)*	NM	Bentonite Grout Seal
175	560								
180	555								
185	550								
190	545	MR	NA					NM	
195	540								

SAMPLE TYPE

- Mud Rotary
- Wireline Rock Coring

GRAPHIC LOG LEGEND

- Silty Clay
- Bedrock
- Mudstone
- Sandstone
- Siltstone

ACRONYM LEGEND

amsl = above mean sea level
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DTW = depth to water
NA = not applicable
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PID = photoionization detector
ppm = parts per million
PVC = polyvinyl chloride

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WELL 2018-01

Client: Gavin Power, LLC **Project Name:** Residual Waste Landfill Monitoring Well Installation

Project Number: 0472342 **Project Location:** Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)	WELL DIAGRAM
200	535								
205	530								
210	525	MR	NA				BEDROCK observed in drill cuttings. *(continued)*	NM	
215	520								
220	515						220.0		
225	510	RC (1)	36	0				NM	
230	505	RC (2)	44	0			Round Knob, Red Brown, MUDSTONE, fine-grained, laminated, moderate to weak, moderately disintegrated, moderately decomposed to fresh, conformable.	NM	
235	500	RC (3)	15	0			235.0	NM	
240	495	RC (4)	117	42			Cow Run, Gray To Light Gray, SANDSTONE, fine-grained, thinly bedded, moderate to strong, fresh, conformable, silt interbeds, silt content increasing with depth, pyrite mineralization from 235 to 236 feet bgs, fracture at 237.5 feet bgs.	NM	

Well Riser (to 235 feet bgs) (2" SCH 40 PVC)

Bentonite Grout Seal

Bentonite Seal

Filter Sand (#0 and #1)

SAMPLE TYPE

- Mud Rotary
- Wireline Rock Coring

GRAPHIC LOG LEGEND

- Silty Clay
- Bedrock
- Mudstone
- Sandstone
- Siltstone

ACRONYM LEGEND

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ppm = parts per million
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WELL 2018-01

Client: Gavin Power, LLC **Project Name:** Residual Waste Landfill Monitoring Well Installation

Project Number: 0472342 **Project Location:** Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)	WELL DIAGRAM
245	490								
250	485	RC (5)	114	43			Cow Run, Gray To Light Gray, SANDSTONE, fine-grained, thinly bedded, moderate to strong, fresh, conformable, silt interbeds, silt content increasing with depth, pyrite mineralization from 235 to 236 feet bgs, fracture at 237.5 feet bgs. *(continued)*	NM	Well Screen (235 to 255 feet bgs) (2" SCH 40 PVC/ 0.01 slot)
255	480						255.5		Sump
260	475	RC (6)	60	0			Gray To Red Brown, SILTSTONE, fine-grained, laminated, weak, slightly decomposed, slightly disintegrated, conformable. 260.0	NM	
							Bottom of Boring @ 260.00 feet bgs		
265	470								
270	465								
275	460								
280	455								

SAMPLE TYPE

- Mud Rotary
- Wireline Rock Coring

GRAPHIC LOG LEGEND

- Silty Clay
- Bedrock
- Mudstone
- Sandstone
- Siltstone

ACRONYM LEGEND

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NM = not measured
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WELL 2018-02

Client: Gavin Power, LLC
Project Name: Residual Waste Landfill Monitoring Well Installation
Project Number: 0472342
Project Location: Cheshire, OH

DATE STARTED: 10/10/2018
DATE COMPLETED: 10/24/2018
DRILLING CONTRACTOR: Terracon
DRILLING METHODS: Mud Rotary/ Rock Coring
LOGGED BY: R. Baisden
CHECKED BY: H. Usle
NOTES: Additional drilling and formation water removed during drawdown test prior to well installation.

TOTAL DEPTH: 195 feet bgs
DIAMETER: 4 inches
GROUND ELEVATION: 755 feet amsl (approx.)
PVC ELEVATION: 757.32 feet amsl
NORTHING: 345708.471
EASTING: 2104765.115

WELL DEVELOPMENT
METHOD(S): Bailer
DATE STARTED: 11/6/2018 11:20:00 AM
DATE ENDED: 11/6/2018 12:15:00 PM
DTW AT START: 182.03 feet bgs
DTW AT END: 182.19 feet bgs
VOLUME PURGED: 6 gallons

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
5	750				CL-ML		Dark Brown, CLAY AND SILT, fine-grained.	
10	745	MR	NA					NM
							11.5	
15	740						Pomeroy, Light Brown, SANDSTONE, fine- to medium-grained, massive, strong, fresh, conformable.	
							18.0	
20	735						Pomeroy, Gray, SILTSTONE, trace fine sand, fine-grained, thinly bedded, moderate, fresh, conformable.	
25	730						25.0	
30	725	MR	NA				Pomeroy, COAL, fine-grained, thinly bedded, moderate, fresh, conformable, organic-rich laminated coal beds.	NM
							32.0	
35	720						Pomeroy, Gray To Light Brown, SANDSTONE, fine-grained, thin to medium bedded, strong, fresh, conformable.	
							35.0	

WELL DIAGRAM

- Concrete Pad and 6" Aluminum Stickup Protective Casing
- Well Riser (to 182 feet bgs) (2" SCH 40 PVC)
- Bentonite Grout Seal

SAMPLE TYPE

- Mud Rotary
- Wireline Rock Coring

GRAPHIC LOG LEGEND

- Silty Clay
- Sandstone
- Siltstone
- Coal
- Shale
- Limestone

ACRONYM LEGEND

amsl = above mean sea level
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DTW = depth to water
NA = not applicable
NM = not measured
NR = no recovery
PID = photoionization detector
ppm = parts per million
PVC = polyvinyl chloride

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WELL 2018-02

Client: Gavin Power, LLC **Project Name:** Residual Waste Landfill Monitoring Well Installation

Project Number: 0472342 **Project Location:** Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)	WELL DIAGRAM
40	715						Pomeroy, Gray To Light Brown, SANDSTONE, fine-grained, thin to medium bedded, strong, fresh, comfortable, gray to black silt and clay crossbeds. *(continued)*		
							40.0		
							Pomeroy, Dark Gray, CLAYSTONE, fine-grained, thinly bedded, moderate, fresh, conformable, micaceous.		
							42.0		
45	710						Pomeroy, Gray, SANDSTONE, some silt, fine to medium grained, thinly bedded, strong, fresh, conformable.		
							49.0		
50	705	MR	NA				Pomeroy, Black, SHALE, fine-grained, laminated, moderate, fresh, conformable.	NM	Well Riser (to 182 feet bgs) (2" SCH 40 PVC)
							49.8		
							Pomeroy, Black, COAL, weak, fresh, conformable.		
							52.0		
55	700								Bentonite Grout Seal
60	695								
65	690						Pittsburg Undifferentiated Units, Dark Gray To Gray, SHALE, fine-grained, laminated, moderate, fresh, conformable, 2-4" coal seams at 60 and 68 feet bgs, transtions to organic-rich shale with nodules at 70 feet bgs.		
70	685	MR	NA					NM	
75	680						75.0		
							Pittsburg, Gray, LIMESTONE, fine-grained, massive, moderate, fresh, conformable.		

SAMPLE TYPE

- Mud Rotary
- Wireline Rock Coring

GRAPHIC LOG LEGEND

- Silty Clay
- Sandstone
- Siltstone
- Coal
- Shale
- Limestone

ACRONYM LEGEND

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WELL 2018-02

Client: Gavin Power, LLC **Project Name:** Residual Waste Landfill Monitoring Well Installation

Project Number: 0472342 **Project Location:** Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)	WELL DIAGRAM
80	675						Pittsburg, Gray, LIMESTONE, fine-grained, massive, moderate, fresh, conformable. *(continued)*		
							80.0		
85	670						Pittsburg Undifferentiated Units, Dark Red, MUDSTONE, fine-grained, thinly bedded, weak, fresh, conformable.		
							88.0		
90	665	MR	NA				Pittsburg Undifferentiated Units, Gray To Dark Gray, SHALE, fine-grained, thinly bedded, strong, fresh, conformable, nodules of limestone from 90 to 95 feet bgs, 5-10 mm pyrite inclusions from 95 to 97.5 feet bgs.	NM	Well Riser (to 182 feet bgs) (2" SCH 40 PVC)
95	660								Bentonite Grout Seal
							97.5		
100	655						Connellsville, Gray To Light Gray, SANDSTONE, fine-grained, thickly bedded, strong, fresh, conformable, clay interbeds.		
							103.0		
105	650						Connellsville, Dark Gray, SILTSTONE, fine-grained, laminated, moderate to strong, slightly decomposed, conformable.		
110	645	MR	NA					NM	
115	640						115.0		
							Connellsville, Gray, LIMESTONE, fine-grained, massive, moderate, fresh, conformable.		
							116.0		
							Connellsville, Gray, SANDSTONE, fine-grained, thickly bedded, strong, fresh, conformable, clay interbeds.		

SAMPLE TYPE

- Mud Rotary
- Wireline Rock Coring

GRAPHIC LOG LEGEND

- Silty Clay
- Sandstone
- Siltstone
- Coal
- Shale
- Limestone

ACRONYM LEGEND

amsl = above mean sea level
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NR = no recovery
PID = photoionization detector
ppm = parts per million
PVC = polyvinyl chloride

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WELL 2018-02

Client: Gavin Power, LLC **Project Name:** Residual Waste Landfill Monitoring Well Installation

Project Number: 0472342 **Project Location:** Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)	WELL DIAGRAM
120	635						Connellsville, Gray, SANDSTONE, fine-grained, thickly bedded, strong, fresh, conformable, clay interbeds. *(continued)*		
							121.0		
125	630						Connellsville, Dark Red, MUDSTONE, fine-grained, thinly bedded, moderate, fresh, conformable.		
							126.0		
							Connellsville, Gray, SANDSTONE, fine-grained, thinly bedded, strong, fresh, conformable, clay interbeds, micaceous.		
130	625	MR	NA				130.0	NM	
							Connellsville, Dark Gray, LIMESTONE, fine-grained, massive, strong, slightly decomposed, slightly disintegrated, conformable, inclusions.		
135	620						135.0		Well Riser (to 182 feet bgs) (2" SCH 40 PVC)
140	615								Bentonite Grout Seal
145	610						Clarksburg, Red To Dark Brown, MUDSTONE, fine-grained, laminated, moderately disintegrated, moderately decomposed, conformable, decomposition fluctuates throughout, gravel and sand inclusions from 162 to 164 feet bgs.		
150	605	MR	NA					NM	
155	600								

SAMPLE TYPE

- Mud Rotary
- Wireline Rock Coring

GRAPHIC LOG LEGEND

- Silty Clay
- Sandstone
- Siltstone
- Coal
- Shale
- Limestone

ACRONYM LEGEND

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NM = not measured
NR = no recovery
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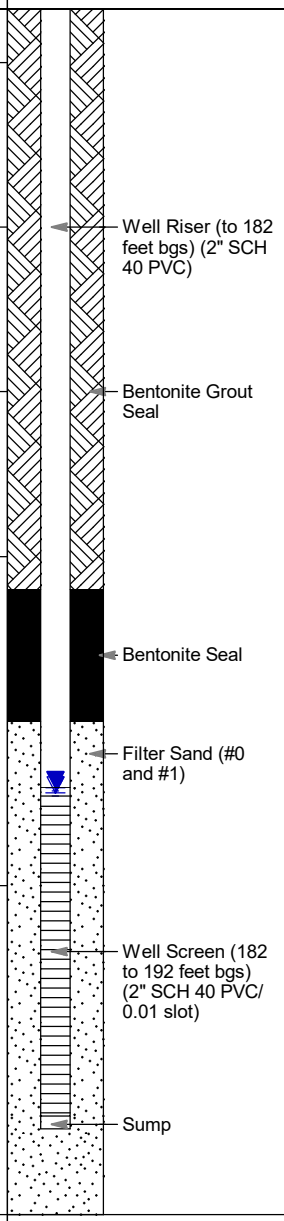
WELL 2018-02

Client: Gavin Power, LLC **Project Name:** Residual Waste Landfill Monitoring Well Installation

Project Number: 0472342 **Project Location:** Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)	WELL DIAGRAM
160	595								
165	590	RC (1)	54	50				NM	
170	585	RC (2)	50	7			Clarksburg, Red To Dark Brown, MUDSTONE, fine-grained, laminated, moderately disintegrated, moderately decomposed, conformable, decomposition fluctuates throughout, gravel and sand inclusions from 162 to 164 feet bgs. *(continued)*	NM	
175	580	RC (3)	55	13				NM	
180	575	RC (4)	113	58				NM	
185	570						182.5 Morgantown, Dark Gray, SANDSTONE, fine-grained, thinly bedded, moderate to strong, fresh, conformable, silt bands near 182.5 feet bgs, silt decreases with depth, micaceous, pyrite inclusions from 187 to 187.8 feet bgs, fracture at 183 feet bgs.		
190	565	RC (5)	113	77			188.5 Morgantown, Gray To Red Brown, SILTSTONE, trace fine sand, fine-grained, thinly bedded, moderate, fresh to slightly decomposed, conformable.	NM	
195	560						194.5 195.0 Round Knob, Red To Dark Brown, MUDSTONE, fine-grained, laminated, moderate, moderately disintegrated, moderately decomposed, conformable. *Bottom of Boring @ 195.00 feet bgs*		



SAMPLE TYPE

- Mud Rotary
- Wireline Rock Coring

GRAPHIC LOG LEGEND

- Silty Clay
- Sandstone
- Siltstone
- Coal
- Shale
- Limestone

ACRONYM LEGEND

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ppm = parts per million
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WELL 2018-03

Client: Gavin Power, LLC
Project Name: Residual Waste Landfill Monitoring Well Installation
Project Number: 0472342
Project Location: Cheshire, OH

DATE STARTED: 10/31/2018
DATE COMPLETED: 11/19/2018
DRILLING CONTRACTOR: Terracon
DRILLING METHODS: Mud Rotary/ Rock Coring
LOGGED BY: R. Baisden
CHECKED BY: H. Usle
NOTES: Additional drilling and formation water removed during drawdown test prior to well installation.

TOTAL DEPTH: 226 feet bgs
DIAMETER: 4 inches
GROUND ELEVATION: 706.81 feet amsl (approx.)
PVC ELEVATION: 708.81 feet amsl
NORTHING: 346131.471
EASTING: 2105235.482

WELL DEVELOPMENT
METHOD(S): Bailer
DATE STARTED: 11/29/2018 9:00:00 AM
DATE ENDED: 11/29/2018 12:00:00 PM
DTW AT START: 200.74 feet bgs
DTW AT END: 222 feet bgs
VOLUME PURGED: 9 gallons

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
5	702				CL-ML		Dark Brown, CLAY AND SILT, fine-grained.	
							6.0	
10	697	MR	NA					NM
15	692							
20	687						BEDROCK observed in drill cuttings from 2018-04.	
25	682							
30	677	MR	NA					NM
35	672							

WELL DIAGRAM:
- Concrete Pad and 6" Aluminum Stickup Protective Casing
- Well Riser (to 197 feet bgs) (2" SCH 40 PVC)
- Bentonite Grout Seal

SAMPLE TYPE
- Mud Rotary
- Wireline Rock Coring

GRAPHIC LOG LEGEND
- Silty Clay
- Bedrock
- Mudstone
- Siltstone
- Sandstone
- Shale

ACRONYM LEGEND
amsl = above mean sea level
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DTW = depth to water
NA = not applicable
NM = not measured
NR = no recovery
PID = photoionization detector
ppm = parts per million
PVC = polyvinyl chloride

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WELL 2018-03

Client: Gavin Power, LLC **Project Name:** Residual Waste Landfill Monitoring Well Installation

Project Number: 0472342 **Project Location:** Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)	WELL DIAGRAM
40	667								
45	662								
50	657	MR	NA					NM	Well Riser (to 197 feet bgs) (2" SCH 40 PVC)
55	652						BEDROCK observed in drill cuttings from 2018-04. *(continued)*		Bentonite Grout Seal
60	647								
65	642								
70	637	MR	NA					NM	
75	632								

SAMPLE TYPE

- Mud Rotary
- Wireline Rock Coring

GRAPHIC LOG LEGEND

- Silty Clay
- Bedrock
- Mudstone
- Siltstone
- Sandstone
- Shale

ACRONYM LEGEND

amsl = above mean sea level
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WELL 2018-03

Client: Gavin Power, LLC **Project Name:** Residual Waste Landfill Monitoring Well Installation

Project Number: 0472342 **Project Location:** Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)	WELL DIAGRAM
80	627								
85	622								
90	617	MR	NA					NM	Well Riser (to 197 feet bgs) (2" SCH 40 PVC)
95	612						BEDROCK observed in drill cuttings from 2018-04. *(continued)*		Bentonite Grout Seal
100	607								
105	602								
110	597	MR	NA					NM	
115	592						115.0 Clarksburg, Red To Dark Brown, MUDSTONE, fine-grained, laminated, moderate, moderately disintegrated, moderately decomposed, conformable, decomposition and disintegration fluctuate throughout, more competent from 125 to 125.9 feet bgs,.		

SAMPLE TYPE

- Mud Rotary
- Wireline Rock Coring

GRAPHIC LOG LEGEND

- Silty Clay
- Bedrock
- Mudstone
- Siltstone
- Sandstone
- Shale

ACRONYM LEGEND

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WELL 2018-03

Client: Gavin Power, LLC **Project Name:** Residual Waste Landfill Monitoring Well Installation

Project Number: 0472342 **Project Location:** Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)	WELL DIAGRAM
120	587						Clarksburg, Red To Dark Brown, MUDSTONE, fine-grained, laminated, moderate, moderately disintegrated, moderately decomposed, conformable, decomposition and disintegration fluctuate throughout, more competent from 125 to 125.9 feet bgs,. *(continued)*		
125	582						125.9 Morgantown, Gray, SILTSTONE, some fine sand, fine-grained, thinly bedded, strong, fresh, conformable.		
							127.8 Morgantown, Red, SILTSTONE, fine-grained, thinly bedded, strong, fresh, conformable. 128.8		
130	577	MR	NA				Morgantown, Gray, SANDSTONE, with silt, fine-grained, thinly bedded, strong, fresh, conformable. 132.5	NM	
135	572						Round Knob, Reddish Brown, MUDSTONE, fine-grained, laminated, moderate, moderately disintegrated, moderately decomposed, conformable, pyrite inclusions from 135.5 to 139.5 feet bgs.		Well Riser (to 197 feet bgs) (2" SCH 40 PVC)
140	567						139.5		Bentonite Grout Seal
145	562								
150	557	MR	NA				Round Knob, Reddish Brown, SHALE, lithology inferred from cuttings.	NM	
155	552								

SAMPLE TYPE

- Mud Rotary
- Wireline Rock Coring

GRAPHIC LOG LEGEND

- Silty Clay
- Bedrock
- Mudstone
- Siltstone
- Sandstone
- Shale

ACRONYM LEGEND

amsl = above mean sea level
bgs = below ground surface
DTW = depth to water
NA = not applicable
NM = not measured
NR = no recovery
PID = photoionization detector
ppm = parts per million
PVC = polyvinyl chloride

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Client: Gavin Power, LLC **Project Name:** Residual Waste Landfill Monitoring Well Installation

Project Number: 0472342 **Project Location:** Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)	WELL DIAGRAM
160	547								
165	542								Well Riser (to 197 feet bgs) (2" SCH 40 PVC)
170	537	MR	NA					NM	Bentonite Grout Seal
175	532						Round Knob, Reddish Brown, SHALE, lithology inferred from cuttings. *(continued)*		
180	527								
185	522	MR	NA					NM	
190	517								
							191.0		
195	512	RC (1)	110	10			Round Knob, Reddish Brown, SHALE, fine-grained, laminated, moderate, moderately disintegrated, moderately decomposed, conformable, grayish green with pyrite inclusions from 191.3 to 195.8 feet bgs.	NM	Bentonite Seal Filter Sand (#0 and #1)
							197.8		
							Cow Run, Dark Gray To Green, SILTSTONE, some fine sand, fine-grained, thinly bedded, moderate to strong, fresh, conformable, fluctuating fine sand content with sand lenses throughout, pyrite inclusions from 215 to 216 feet bgs.		

SAMPLE TYPE

- Mud Rotary
- Wireline Rock Coring

GRAPHIC LOG LEGEND

- Silty Clay
- Bedrock
- Mudstone
- Siltstone
- Sandstone
- Shale

ACRONYM LEGEND

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ppm = parts per million
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WELL 2018-03

Client: Gavin Power, LLC **Project Name:** Residual Waste Landfill Monitoring Well Installation

Project Number: 0472342 **Project Location:** Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)	WELL DIAGRAM
200	507								
205	502	RC (2)	111	23			Cow Run, Dark Gray To Green, SILTSTONE, some fine sand, fine-grained, thinly bedded, moderate to strong, fresh, conformable, fluctuating fine sand content with sand lenses throughout, pyrite inclusions from 215 to 216 feet bgs. *(continued)*	NM	
210	497								Well Screen (197 to 222 feet bgs) (2" SCH 40 PVC/ 0.01 slot)
215	492	RC (3)	51	0				NM	
							216.0		
220	487	RC (4)	112	12			Dark Green, SILTSTONE, fine-grained, thinly bedded, moderate to strong, fresh, conformable.	NM	
							221.5		Sump
225	482						Red Brown, SHALE, fine-grained, laminated, moderate, moderately disintegrated, moderately decomposed, conformable.		
							226.0		
							Bottom of Boring @ 226.00 feet bgs		
230	477								
235	472								
240	467								

SAMPLE TYPE

- Mud Rotary
- Wireline Rock Coring

GRAPHIC LOG LEGEND

- Silty Clay
- Bedrock
- Mudstone
- Siltstone
- Sandstone
- Shale

ACRONYM LEGEND

amsl = above mean sea level
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DTW = depth to water
NA = not applicable
NM = not measured
NR = no recovery
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ppm = parts per million
PVC = polyvinyl chloride

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WELL 2018-04

Client: Gavin Power, LLC
Project Name: Residual Waste Landfill Monitoring Well Installation
Project Number: 0472342
Project Location: Cheshire, OH

DATE STARTED: 10/25/2018
DATE COMPLETED: 11/1/2018
DRILLING CONTRACTOR: Terracon
DRILLING METHODS: Mud Rotary/ Rock Coring
LOGGED BY: R.Baisden
CHECKED BY: H. Usle
NOTES: Additional drilling and formation water removed during drawdown test prior to well installation.

TOTAL DEPTH: 140 feet bgs
DIAMETER: 4 inches
GROUND ELEVATION: 704.38 feet amsl (approx.)
PVC ELEVATION: 708.18 feet amsl
NORTHING: 346141.386
EASTING: 2105235.044

WELL DEVELOPMENT
METHOD(S): Bailer
DATE STARTED: 11/29/2018 12:15:00 PM
DATE ENDED: 11/29/2018 12:45:00 PM
DTW AT START: 132.19 feet bgs
DTW AT END: 133.5 feet bgs
VOLUME PURGED: 4.5 gallons

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
5	699				CL-ML		Light Brown To Medium Brown, CLAY AND SILT, fine-grained.	
10	694	MR	NA				10.0	NM
							Black, COAL, observed in drill cuttings. 11.0	
15	689							
20	684							
25	679						Gray To Dark Gray, MUDSTONE, slightly silty, observed in drill cuttings.	
30	674	MR	NA					NM
							32.5	
35	669						Light Gray, SANDSTONE, medium-grained observed in drill cuttings.	

WELL DIAGRAM

- Concrete Pad and 6" Aluminum Stickup Protective Casing
- Well Riser (to 123.5 feet bgs) (2" SCH 40 PVC)
- Bentonite Grout Seal

SAMPLE TYPE

- Mud Rotary
- Wireline Rock Coring

GRAPHIC LOG LEGEND

- Silty Clay
- Coal
- Mudstone
- Sandstone
- Siltstone

ACRONYM LEGEND

amsl = above mean sea level
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PID = photoionization detector
ppm = parts per million
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WELL 2018-04

Client: Gavin Power, LLC **Project Name:** Residual Waste Landfill Monitoring Well Installation

Project Number: 0472342 **Project Location:** Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)	WELL DIAGRAM
							Light Gray, SANDSTONE, medium-grained observed in drill cuttings. *(continued)*		
							38.0		
40	664						Gray, SILTSTONE, medium sand lenses, observed in drill cuttings.		
							40.0		
45	659								
							Gray, SILTSTONE, observed in drill cuttings.		
50	654	MR	NA					NM	Well Riser (to 123.5 feet bgs) (2" SCH 40 PVC)
55	649						55.0		Bentonite Grout Seal
							Red, MUDSTONE, observed in drill cuttings.		
60	644								
							64.0		
65	639						SANDSTONE, fine to medium grained, observed in drill cuttings.		
							66.0		
70	634	MR	NA				Red Brown, MUDSTONE, drill slows down around 75 feet bgs, observed in drill cuttings.	NM	
75	629								

SAMPLE TYPE

- Mud Rotary
- Wireline Rock Coring

GRAPHIC LOG LEGEND

- Silty Clay
- Coal
- Mudstone
- Sandstone
- Siltstone

ACRONYM LEGEND

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WELL 2018-04

Client: Gavin Power, LLC **Project Name:** Residual Waste Landfill Monitoring Well Installation

Project Number: 0472342 **Project Location:** Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)	WELL DIAGRAM
80	624						Red Brown, MUDSTONE, drill slows down around 75 feet bgs, observed in drill cuttings. *(continued)*		
							82.0		
85	619								
90	614	MR	NA					NM	Well Riser (to 123.5 feet bgs) (2" SCH 40 PVC)
95	609								Bentonite Grout Seal
100	604						Clarksburg, Red Brown, SILTSTONE, observed in drill cuttings.		
105	599								
		MR	NA					NM	
110	594								
115	589						115.0		
							Clarksburg, Red To Dark Brown, MUDSTONE, fine-grained, laminated, moderate, moderately disintegrated, moderately decomposed, conformable, decomposition fluctuates throughout, more competent from 125 to 125.9 feet bgs.		

SAMPLE TYPE

- Mud Rotary
- Wireline Rock Coring

GRAPHIC LOG LEGEND

- Silty Clay
- Coal
- Mudstone
- Sandstone
- Siltstone

ACRONYM LEGEND

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WELL 2018-04

Client: Gavin Power, LLC **Project Name:** Residual Waste Landfill Monitoring Well Installation

Project Number: 0472342 **Project Location:** Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)	WELL DIAGRAM
120	584	RC (1)	55	30				NM	Bentonite Seal
125	579	RC (2)	45	35			Clarksburg, Red To Dark Brown, MUDSTONE, fine-grained, laminated, moderate, moderately disintegrated, moderately decomposed, conformable, decomposition fluctuates throughout, more competent from 125 to 125.9 feet bgs. *(continued)*	NM	Filter Sand (#0 and #1)
130	574	RC (3)	60	97			125.9 Morgantown, Gray, SILTSTONE, some fine sand, fine-grained, thinly bedded, strong, fresh, conformable. 127.8 Morgantown, Red, SILTSTONE, fine-grained, thinly bedded, strong, fresh, conformable. 128.8	NM	Well Screen (123.5 to 133.5 feet bgs) (2" SCH 40 PVC/ 0.01 slot)
135	569	RC (4)	58	88			Morgantown, Gray, SANDSTONE, with silt, fine-grained, thinly bedded, strong, fresh, conformable, unfractured. 132.5	NM	Sump
140	564	RC (5)	60	82			Round Knob, Reddish Brown, MUDSTONE, fine-grained, laminated, moderate, moderately disintegrated, moderately decomposed, conformable, pyrite inclusions from 135.5 to 139.5 feet bgs. 140.0	NM	
145	559						*Bottom of Boring @ 140.00 feet bgs*		
150	554								
155	549								

SAMPLE TYPE

- Mud Rotary
- Wireline Rock Coring

GRAPHIC LOG LEGEND

- Silty Clay
- Coal
- Mudstone
- Sandstone
- Siltstone

ACRONYM LEGEND

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WELL 2019-02

Client: Gavin Power, LLC
Project Name: Residual Waste Landfill Monitoring Well Installation
Project Number: 0488799
Project Location: Cheshire, OH

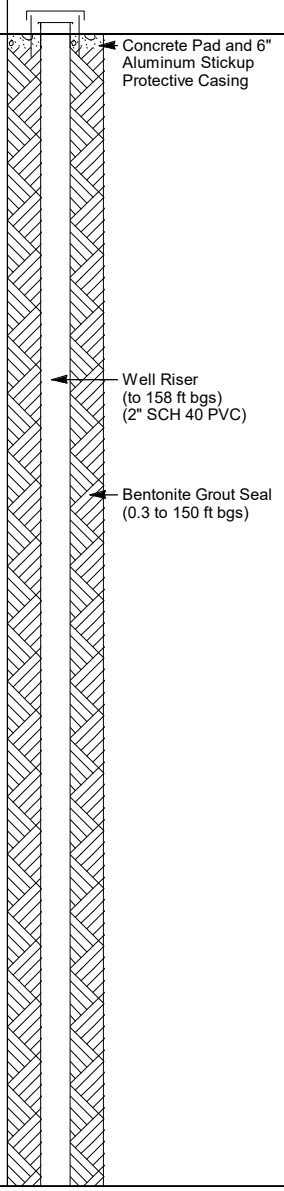
DATE STARTED: 2/14/2020
DATE COMPLETED: 2/20/2020
DRILLING CONTRACTOR: Frontz Drilling, Inc.
DRILLING METHODS: Sonic Drilling/ Rock Coring
LOGGED BY: L. Velasquez
CHECKED BY: H. Usle
NOTES: Steel casing (6") advanced to 148 ft bgs; 4" rock coring to termination depth.

TOTAL DEPTH: 178 ft bgs
DIAMETER: 4-6 inches
GROUND ELEVATION: 739.55 ft amsl (approx.)
PVC ELEVATION: 742.35 ft amsl
NORTHING: 345950.995
EASTING: 2101809.107

WELL DEVELOPMENT
METHOD(S): Air Lift, Grundfos & Buffalo Pump
DATE STARTED: 3/2/2020
DATE ENDED: 4/21/2020
DTW AT START: 29.9 ft bgs
DTW AT END: 141.4 ft bgs
VOLUME PURGED: 48.5 gallons

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
5	735	SC					Overburden and Bedrock logging not conducted from ground surface to 148 ft bgs.
10	730						
15	725	SC					
20	720						
25	715						

WELL DIAGRAM



SAMPLE TYPE
- Sonic Drilling
- Wireline Rock Coring

GRAPHIC LOG LEGEND
- SANDSTONE Sandstone
- SILTSTONE Siltstone
- SHALE Shale

ACRONYM LEGEND
amsl = above mean sea level
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U.S.C.S. = Unified Soil Classification System

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WELL 2019-02

Client: Gavin Power, LLC **Project Name:** Residual Waste Landfill Monitoring Well Installation

Project Number: 0488799 **Project Location:** Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
30	710	SC					Overburden and Bedrock logging not conducted from ground surface to 148 ft bgs. *(continued)*	Well Riser (to 158 ft bgs) (2" SCH 40 PVC)
35	705	SC						
40	700							Bentonite Grout Seal (0.3 to 150 ft bgs)
45	695	SC						
50	690							

SAMPLE TYPE

- Sonic Drilling
- Wireline Rock Coring

GRAPHIC LOG LEGEND

- SANDSTONE Sandstone
- SILTSTONE Siltstone
- SHALE Shale

ACRONYM LEGEND

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WELL 2019-02

Client: Gavin Power, LLC **Project Name:** Residual Waste Landfill Monitoring Well Installation

Project Number: 0488799 **Project Location:** Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
55	685	SC					Overburden and Bedrock logging not conducted from ground surface to 148 ft bgs. *(continued)*	Well Riser (to 158 ft bgs) (2" SCH 40 PVC)
60	680							
65	675	SC						
70	670							Bentonite Grout Seal (0.3 to 150 ft bgs)
75	665	SC						
80	660							

SAMPLE TYPE

- Sonic Drilling
- Wireline Rock Coring

GRAPHIC LOG LEGEND

- SANDSTONE Sandstone
- SILTSTONE Siltstone
- SHALE Shale

ACRONYM LEGEND

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Project Number: 0488799 **Project Location:** Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
85	655	SC					Overburden and Bedrock logging not conducted from ground surface to 148 ft bgs. *(continued)*	Well Riser (to 158 ft bgs) (2" SCH 40 PVC)
90	650							
95	645	SC						
100	640							Bentonite Grout Seal (0.3 to 150 ft bgs)
105	635	SC						
110	630							

SAMPLE TYPE

- Sonic Drilling
- Wireline Rock Coring

GRAPHIC LOG LEGEND

- SANDSTONE Sandstone
- SILTSTONE Siltstone
- SHALE Shale

ACRONYM LEGEND

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WELL 2019-02

Client: Gavin Power, LLC **Project Name:** Residual Waste Landfill Monitoring Well Installation

Project Number: 0488799 **Project Location:** Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
115	625	SC						
120	620							
125	615	SC					Overburden and Bedrock logging not conducted from ground surface to 148 ft bgs. *(continued)*	Well Riser (to 158 ft bgs) (2" SCH 40 PVC)
130	610							Bentonite Grout Seal (0.3 to 150 ft bgs)
135	605	SC						
140	600							

SAMPLE TYPE

- Sonic Drilling
- Wireline Rock Coring

GRAPHIC LOG LEGEND

- SANDSTONE Sandstone
- SILTSTONE Siltstone
- SHALE Shale

ACRONYM LEGEND

amsl = above mean sea level
bgs = below ground surface
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DTW = depth to water
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Client: Gavin Power, LLC **Project Name:** Residual Waste Landfill Monitoring Well Installation

Project Number: 0488799 **Project Location:** Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
145	595	SC					Overburden and Bedrock logging not conducted from ground surface to 148 ft bgs. *(continued)*
							148.0
							NO RECOVERY.
							149.0
150	590						Reddish Brown, SANDSTONE TO SILTSTONE, fine-grained, moderate strength, 10% bedding planes. (Clarksburg), soft.
		RC (1)	108	68			153.0
							Grayish Green, SILTSTONE AND SANDSTONE, very fine-grained, interbedded, moderate strength, fresh, competent, 20% bedding planes at 154 ft bgs. (Morgantown), hard.
							154.5
155	585						Grayish Green, SANDSTONE, fine-grained, strong, healed fracture/joint observed at 155 ft bgs. (Morgantown).
							155.5
							Grayish Green, SILTSTONE AND SANDSTONE, interbedded, moderate strength, fresh, competent, 10% bedding planes. (Morgantown).
							157.0
							Grayish Green, SHALE, minor siltstone, moderate strength, (Morgantown), soft.
							158.0
160	580						NO RECOVERY.
							162.0
		RC (2)	72	35			Grayish Green, SANDSTONE, minor siltstone, fine-grained, interbedded, fresh, competent.
							164.0
165	575						Reddish Brown, SANDSTONE TO SILTSTONE, fine-grained, interbedded, moderate strength, soft.
							165.0
							Grayish Green, SANDSTONE, minor shale, fine-grained, interbedded, fresh, competent, hard.
							166.0
							Grayish Green, SHALE, minor siltstone, interbedded, moderate strength, soft.
							168.0
170	570						NO RECOVERY.

WELL DIAGRAM

- Bentonite Seal (150 to 156 ft bgs)
- Filter Sand (#0 and #1) (156 to 178 ft bgs)
- Well Screen (158 to 178 ft bgs) (2" SCH 40 PVC/ 0.01" slot)

SAMPLE TYPE

- Sonic Drilling
- Wireline Rock Coring

GRAPHIC LOG LEGEND

- SANDSTONE Sandstone
- SILTSTONE Siltstone
- SHALE Shale

ACRONYM LEGEND

amsl = above mean sea level
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WELL 2019-02

Client: Gavin Power, LLC **Project Name:** Residual Waste Landfill Monitoring Well Installation

Project Number: 0488799 **Project Location:** Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
175	565	RC (3)	NR				NO RECOVERY. *(continued)*	Well Screen (158 to 178 ft bgs) (2" SCH 40 PVC/ 0.01" slot)
							178.0	End Cap
							Bottom of Boring @ 178.00 feet bgs	
180	560							
185	555							
190	550							
195	545							
200	540							

SAMPLE TYPE

- Sonic Drilling
- Wireline Rock Coring

GRAPHIC LOG LEGEND

- SANDSTONE Sandstone
- SILTSTONE Siltstone
- SHALE Shale

ACRONYM LEGEND

amsl = above mean sea level
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WELL 2019-06

Client: Gavin Power, LLC
Project Name: Residual Waste Landfill Monitoring Well Installation
Project Number: 0488799
Project Location: Cheshire, OH

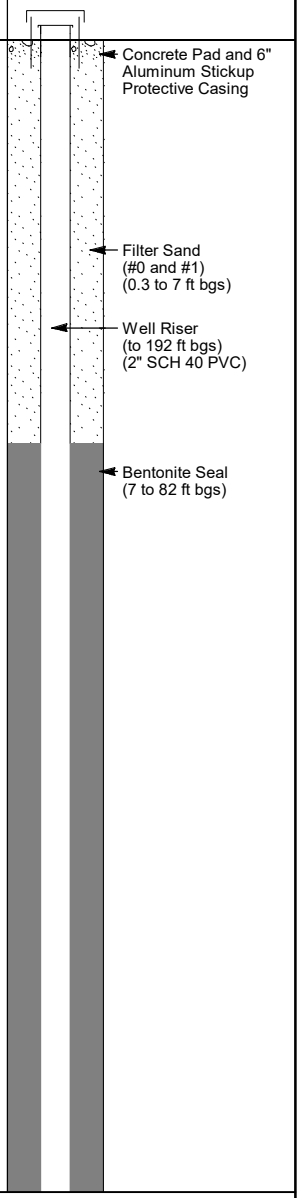
DATE STARTED: 1/20/2020
DATE COMPLETED: 1/28/2020
DRILLING CONTRACTOR: Frontz Drilling, Inc.
DRILLING METHODS: Sonic Drilling/ Rock Coring
LOGGED BY: L. Velasquez
CHECKED BY: H. Usle
NOTES: Steel casing (6") advanced to 178 ft bgs; 4" rock coring to termination depth.

TOTAL DEPTH: 228 ft bgs
DIAMETER: 4-6 inches
GROUND ELEVATION: 813.07 ft amsl (approx.)
PVC ELEVATION: 815.92 ft amsl
NORTHING: 347851.285
EASTING: 2100292.973

WELL DEVELOPMENT
METHOD(S): Air Lift, PVC Bailer
DATE STARTED: 3/5/2020
DATE ENDED: 5/22/2020
DTW AT START: 86.4 ft bgs
DTW AT END: 191.6 ft bgs
VOLUME PURGED: 33.5 gallons

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
5	808	SC					Overburden and Bedrock logging not conducted from ground surface to 178 ft bgs. Potential 3 ft void observed at 75 ft bgs.
10	803						
15	798	SC					
20	793						

WELL DIAGRAM



SAMPLE TYPE
- Sonic Drilling
- Wireline Rock Coring

GRAPHIC LOG LEGEND
- SANDSTONE Sandstone
- SILTSTONE Siltstone
- SHALE Shale

ACRONYM LEGEND
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PVC = polyvinyl chloride
U.S.C.S. = Unified Soil Classification System

ERM
1 Beacon Street: 5th Floor
Boston, MA 02108
Telephone: +1 (617) 646-7800

Client: Gavin Power, LLC **Project Name:** Residual Waste Landfill Monitoring Well Installation

Project Number: 0488799 **Project Location:** Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
25	788	SC					Overburden and Bedrock logging not conducted from ground surface to 178 ft bgs. Potential 3 ft void observed at 75 ft bgs. *(continued)*	Well Riser (to 192 ft bgs) (2" SCH 40 PVC)
30	783							
35	778	SC						Bentonite Seal (7 to 82 ft bgs)
40	773							

SAMPLE TYPE

- Sonic Drilling
- Wireline Rock Coring

GRAPHIC LOG LEGEND

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Project Number: 0488799 **Project Location:** Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
45	768	SC						
50	763							
55	758	SC					Overburden and Bedrock logging not conducted from ground surface to 178 ft bgs. Potential 3 ft void observed at 75 ft bgs. *(continued)*	Well Riser (to 192 ft bgs) (2" SCH 40 PVC)
60	753							Bentonite Seal (7 to 82 ft bgs)
65	748	SC						

SAMPLE TYPE

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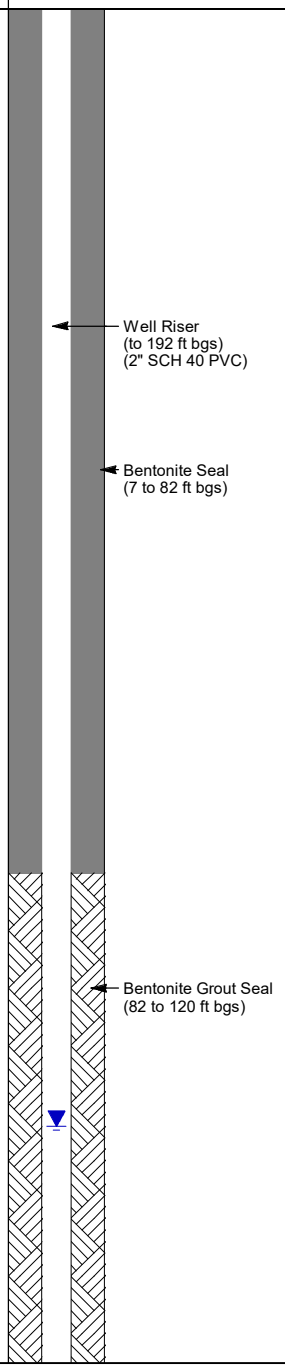
DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
70	743							
75	738	SC						
80	733						Overburden and Bedrock logging not conducted from ground surface to 178 ft bgs. Potential 3 ft void observed at 75 ft bgs. *(continued)*	
85	728	SC						
90	723							



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DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
95	718	SC					Overburden and Bedrock logging not conducted from ground surface to 178 ft bgs. Potential 3 ft void observed at 75 ft bgs. *(continued)*	Well Riser (to 192 ft bgs) (2" SCH 40 PVC)
100	713							
105	708	SC						Bentonite Grout Seal (82 to 120 ft bgs)
110	703							

SAMPLE TYPE

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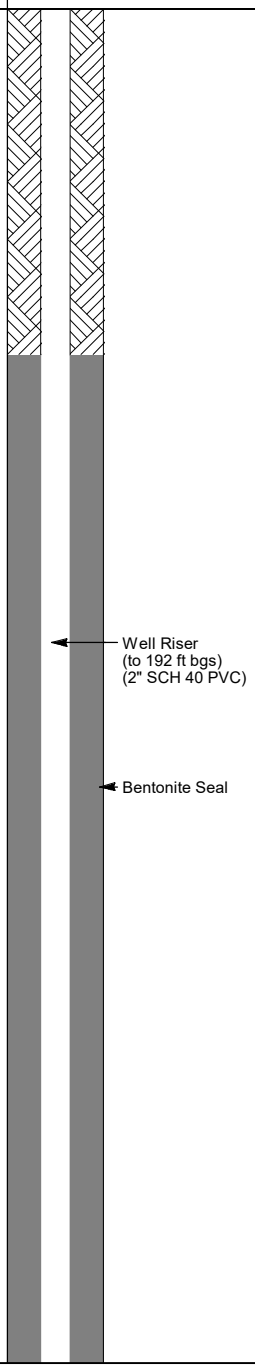
DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
115	698	SC					Overburden and Bedrock logging not conducted from ground surface to 178 ft bgs. Potential 3 ft void observed at 75 ft bgs. *(continued)*
120	693						
125	688	SC					
130	683						
135	678	SC					

WELL DIAGRAM



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- Wireline Rock Coring

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DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
140	673							
145	668	SC						Well Riser (to 192 ft bgs) (2" SCH 40 PVC)
150	663						Overburden and Bedrock logging not conducted from ground surface to 178 ft bgs. Potential 3 ft void observed at 75 ft bgs. *(continued)*	Bentonite Grout Seal (82 to 120 ft bgs)
155	658	SC						
160	653							

SAMPLE TYPE

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- Wireline Rock Coring

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Project Number: 0488799
Project Location: Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
165	648	SC					Overburden and Bedrock logging not conducted from ground surface to 178 ft bgs. Potential 3 ft void observed at 75 ft bgs. *(continued)*	"Well Riser (to 192 ft bgs) (2"" SCH 40 PVC)"
170	643							
175	638	SC						Bentonite Grout Seal (82 to 120 ft bgs)
							178.0	
							NO RECOVERY.	
180	633						180.0	
		RC (1)	96	52			Reddish Brown, SANDSTONE TO SILTSTONE, with interbedded shale, fine-grained, weak to moderate strength, moderately decomposed, red and light green discoloration, soft.	
							183.0	
							Grayish Green, SANDSTONE TO SILTSTONE, with interbedded shale, fine-grained, weak to moderate strength, moderately decomposed, red and light green discoloration from 186 to 188 ft bgs, soft.	

SAMPLE TYPE

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- Wireline Rock Coring

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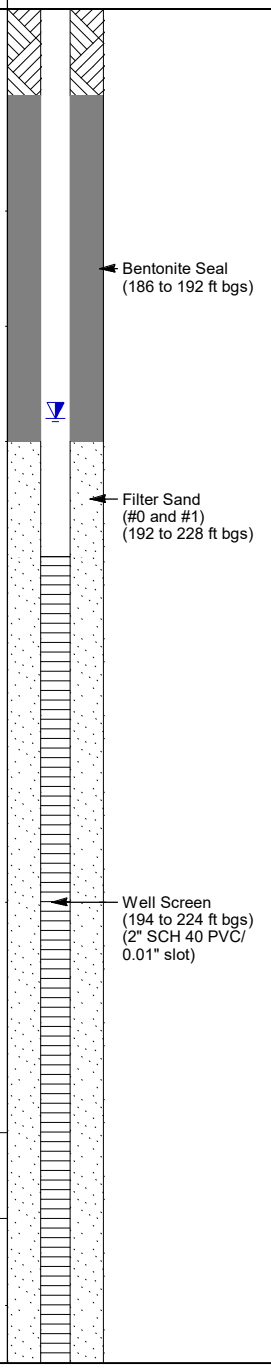
Project Number: 0488799 **Project Location:** Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
185	628						Grayish Green, SANDSTONE TO SILTSTONE, with interbedded shale, fine-grained, weak to moderate strength, moderately decomposed, red and light green discoloration from 186 to 188 ft bgs, soft. *(continued)*
							188.0
							NO RECOVERY.
190	623						190.0
							Reddish Brown, SANDSTONE TO SILTSTONE, with shale, fine-grained, weak to moderate strength, moderately decomposed, red and light green discoloration, soft.
							192.0
		RC (2)	96	61			
195	618						Grayish Green, SANDSTONE, with interbedded claystone and shale, fine- to medium-grained, moderate strength, moderately decomposed, competent, red and light green discoloration, thinly laminated from 193 to 196 ft bgs, rubble zone from 192 to 198 ft bgs. (Morgantown), hard.
200	613						200.0
		RC (3)	108	64			Grayish Green to Reddish Brown, SANDSTONE, with interbedded shale, fine- to medium-grained, weak to moderate strength, competent, fresh from 200 to 202 ft bgs, moderately decomposed from 202 to 204 ft bgs, thinly laminated (possibly drilling induced), extends 2 millimeters within, hard.
							204.0
205	608						Reddish Brown, SILTSTONE WITH SHALE, interbedded weak to moderate strength, moderately decomposed, rubble zone, soft.
							205.5
							Grayish Green, SILTSTONE WITH SHALE, interbedded moderate strength, soft.
							207.0
							NO RECOVERY.
							208.0



SAMPLE TYPE

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WELL 2019-06

Client: Gavin Power, LLC **Project Name:** Residual Waste Landfill Monitoring Well Installation

Project Number: 0488799 **Project Location:** Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
210	603	RC (4)	120	50			Reddish Brown, SILTY SANDSTONE, with interbedded shale, fine-grained, moderate strength, moderately decomposed. *(continued)*	
							212.0	
							Grayish Green, SANDSTONE, some interbedded claystone, fine- to medium-grained, fresh, competent, hard.	Filter Sand (#0 and #1) (192 to 228 ft bgs)
							213.5	
215	598						Grayish Green, SILTSTONE WITH SHALE, interbedded moderate strength, soft.	
							217.0	
							Grayish Green, SHALE, moderate strength, soft.	
							218.0	
		RC (5)	111	48			Grayish Green, SILTSTONE WITH SHALE, interbedded moderate strength, soft.	
							219.0	
220	593						Grayish Green, SANDSTONE, interbedded fine- to medium-grained, fresh, competent, hard.	Well Screen (194 to 224 ft bgs) (2" SCH 40 PVC/ 0.01" slot)
							224.0	End Cap
225	588						Grayish Green, CLAYSTONE AND SHALE, moderate strength, pyrite mineralization, soft.	
							227.3	
							NO RECOVERY.	
							228.0	
230	583						*Bottom of Boring @ 228.00 feet bgs*	

SAMPLE TYPE

- Sonic Drilling
- Wireline Rock Coring

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WELL 2019-07

Client: Gavin Power, LLC
Project Name: Residual Waste Landfill Monitoring Well Installation
Project Number: 0488799
Project Location: Cheshire, OH

DATE STARTED: 1/6/2020
DATE COMPLETED: 1/20/2020
DRILLING CONTRACTOR: Frontz Drilling, Inc.
DRILLING METHODS: Sonic Drilling/ Rock Coring
LOGGED BY: L. Velasquez
CHECKED BY: H. Usle

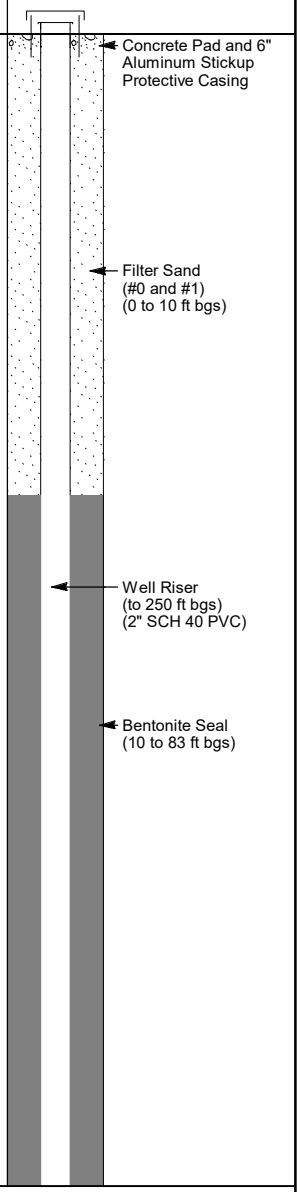
TOTAL DEPTH: 278 ft bgs
DIAMETER: 4-6 inches
GROUND ELEVATION: 812.91 ft amsl (approx.)
PVC ELEVATION: 815.91 ft amsl
NORTHING: 347854.684
EASTING: 2100289.463

WELL DEVELOPMENT
METHOD(S): Air Lift, Grundfos Pump
DATE STARTED: 3/5/2020
DATE ENDED: 5/22/2020
DTW AT START: 225.1 ft bgs
DTW AT END: 269.6 ft bgs
VOLUME PURGED: 15.5 gallons

NOTES: Steel casing (6") advanced to 80 ft bgs; 4" sonic casing to 198 ft bgs; 4" rock coring to termination depth.

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
5	808	SC					
10	803						Overburden and Bedrock logging not conducted from ground surface to 198 ft bgs. Potential 3 ft void observed at 75 ft bgs.
15	798	SC					
20	793						
25	788						

WELL DIAGRAM



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30	783	SC						
35	778	SC						Well Riser (to 250 ft bgs) (2" SCH 40 PVC)
40	773						Overburden and Bedrock logging not conducted from ground surface to 198 ft bgs. Potential 3 ft void observed at 75 ft bgs. *(continued)*	Bentonite Seal (10 to 83 ft bgs)
45	768	SC						
50	763							

SAMPLE TYPE

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DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
55	758	SC					Overburden and Bedrock logging not conducted from ground surface to 198 ft bgs. Potential 3 ft void observed at 75 ft bgs. *(continued)*	Well Riser (to 250 ft bgs) (2" SCH 40 PVC)
60	753							
65	748	SC						
70	743							Bentonite Seal (10 to 83 ft bgs)
75	738	SC						
80	733							

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DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
85	728	SC					Overburden and Bedrock logging not conducted from ground surface to 198 ft bgs. Potential 3 ft void observed at 75 ft bgs. *(continued)*	Well Riser (to 250 ft bgs) (2" SCH 40 PVC)
90	723							
95	718	SC						
100	713							Bentonite Grout Seal (83 to 241 ft bgs)
105	708	SC						
110	703							

SAMPLE TYPE

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WELL 2019-07

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DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
115	698	SC					Overburden and Bedrock logging not conducted from ground surface to 198 ft bgs. Potential 3 ft void observed at 75 ft bgs. *(continued)*	Well Riser (to 250 ft bgs) (2" SCH 40 PVC)
120	693							
125	688	SC						
130	683							Bentonite Grout Seal (83 to 241 ft bgs)
135	678	SC						
140	673							

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145	668	SC					Overburden and Bedrock logging not conducted from ground surface to 198 ft bgs. Potential 3 ft void observed at 75 ft bgs. *(continued)*	Well Riser (to 250 ft bgs) (2" SCH 40 PVC)
150	663							
155	658	SC						
160	653							Bentonite Grout Seal (83 to 241 ft bgs)
165	648	SC						
170	643							

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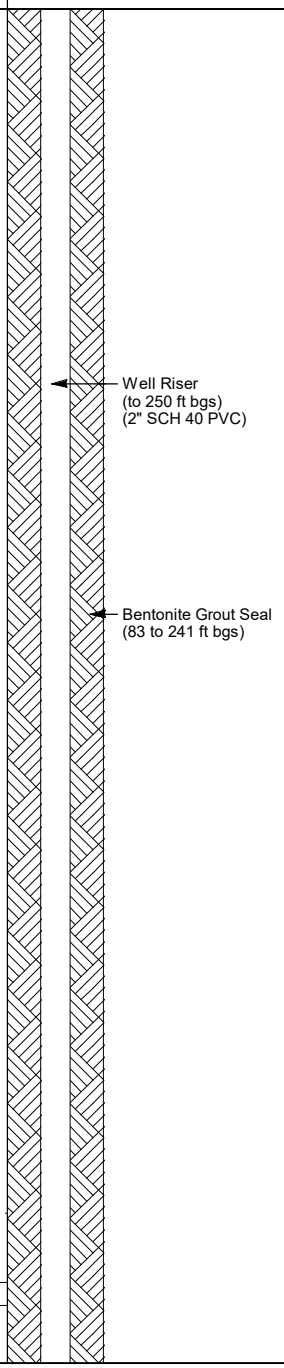
DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
175	638	SC					
180	633						
185	628	SC					Overburden and Bedrock logging not conducted from ground surface to 198 ft bgs. Potential 3 ft void observed at 75 ft bgs. *(continued)*
190	623						
195	618	SC					
							198.0
							Light Grayish Green, SANDSTONE, coarse-grained, fresh, competent, hard.
							199.5
200	613						200.0 Green and Red, SILTSTONE, fine-grained, laminated, some organics.
							Dark Grayish Green, SANDSTONE, with silt, coarse-grained, laminated, weak to moderate, some red discoloration, soft.

WELL DIAGRAM



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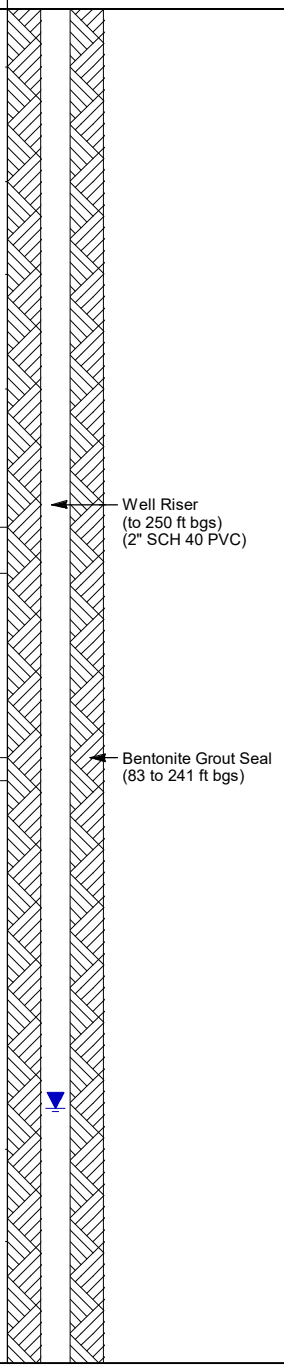
		RC (1)	108	23			Dark Grayish Green, SANDSTONE, with silt, coarse-grained, laminated, weak to moderate, some red discoloration, soft. *(continued)*
							202.5
							Reddish Brown, SILTY SANDSTONE, with clay, fine- to coarse-grained, laminated, weak to moderate, conchoidal breakage, rubble zone.
205	608						205.0
							Reddish Brown, SANDSTONE, with silt, very fine- to fine-grained, conchoidal, clay nodules present, rubble zone.
							207.0
							NO RECOVERY.
							209.5
210	603						Grayish Green to Reddish Brown, SANDSTONE WITH SHALE, interbedded very fine- to fine-grained, weak, moderately decomposed, red and light green discoloration, vertical healed joint from 210.5 to 211 ft bgs, soft.
							212.5
		RC (2)	102	51			Dark Green to Reddish Brown, CLAYSTONE, fine-grained.
							213.5
215	598						Grayish Green, SANDSTONE, fine- to medium-grained, competent, fresh, thin laminations, red and light green discoloration, hard.
							217.5
							218.0 Grayish Green to Reddish Brown, CLAYSTONE, very fine- to fine-grained.
220	593						Grayish Green, SANDSTONE, medium-grained, strong, fresh, competent, hard.
		RC (3)	120	75			
225	588						
							226.0
							Grayish Green, SANDSTONE, with interbedded claystone, fine- to medium-grained, fresh, competent, some coarse pyrite mineralization, hard.
							228.0
230	583						NO RECOVERY.

WELL DIAGRAM



SAMPLE TYPE

- Sonic Drilling
- Wireline Rock Coring

GRAPHIC LOG LEGEND

- SANDSTONE Sandstone
- SILTSTONE Siltstone
- CLAYSTONE Claystone
- SHALE Shale

ACRONYM LEGEND

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U.S.C.S. = Unified Soil Classification System

ERM
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Telephone: +1 (617) 646-7800

Client: Gavin Power, LLC **Project Name:** Residual Waste Landfill Monitoring Well Installation

Project Number: 0488799 **Project Location:** Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
		RC (4)	84	22			231.0 Grayish Green, SANDSTONE, with interbedded claystone, very fine- to fine-grained, fresh, competent, some coarse pyrite mineralization, hard.
235	578						235.0 Reddish Brown, SILTSTONE, very fine-grained, strong, slightly decomposed, competent, hard.
							238.0 NO RECOVERY.
240	573						241.0 Reddish Brown, SILTSTONE, very fine-grained, strong, slightly decomposed, competent, some green discoloration, soft.
		RC (5)	84	33			243.0 Grayish Green, SHALE, some silt, some coarse-grained, moderate to weak, slightly decomposed, some red discoloration, soft.
245	568						248.0 Grayish Green to Reddish Brown, SHALE, interbedded massive, moderate to weak, moderately decomposed, some yellow green discoloration, soft.
250	563	RC (6)	120	38			253.0 Grayish Green to Reddish Brown, SHALE, moderately decomposed, rubble.
							254.0 Grayish Green to Reddish Brown, WEATHERED SHALE, massive, moderate to weak, moderately decomposed, some yellow green discoloration, easily crumbled, some coarse pyrite mineralization, soft.
255	558						258.0
							258.5 NO RECOVERY.
260	553						Grayish Green to Reddish Brown, WEATHERED SHALE, laminated, moderate to weak, moderately decomposed, some yellow green discoloration, soft.

WELL DIAGRAM

- Bentonite Seal (241 to 247 ft bgs)
- Filter Sand (#0 and #1) (247 to 272 ft bgs)
- Well Screen (250 to 270 ft bgs) (2" SCH 40 PVC/ 0.01" slot)

SAMPLE TYPE

- Sonic Drilling
- Wireline Rock Coring

GRAPHIC LOG LEGEND

- SANDSTONE Sandstone
- SILTSTONE Siltstone
- CLAYSTONE Claystone
- SHALE Shale

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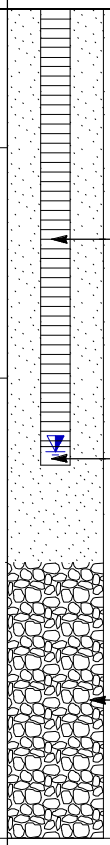
WELL 2019-07

Client: Gavin Power, LLC
Project Name: Residual Waste Landfill Monitoring Well Installation
Project Number: 0488799
Project Location: Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
		RC (7)	114	67			Grayish Green to Reddish Brown, WEATHERED SHALE, laminated, moderate to weak, moderately decomposed, some yellow green discoloration, soft. *(continued)*
							263.0
265	548						Grayish Green to Reddish Brown, SANDSTONE, with silt, very fine-grained, massive, moderate strength, moderately decomposed, competent, soft.
							268.0
270	543						Grayish Green to Reddish Brown, WEATHERED SHALE, laminated, moderate to weak, moderately decomposed, some yellow green and purple discoloration, healed joint at 269.5 ft bgs, shear fracture with slickensides at 271.5 ft bgs (30° dip), soft.
							272.0
		RC (8)	48	12			NO RECOVERY.
275	538						
							278.0
280	533						*Bottom of Boring @ 278.00 feet bgs*
285	528						

WELL DIAGRAM



SAMPLE TYPE

- Sonic Drilling
- Wireline Rock Coring

GRAPHIC LOG LEGEND

- SANDSTONE Sandstone
- SILTSTONE Siltstone
- CLAYSTONE Claystone
- SHALE Shale

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WELL 2019-09

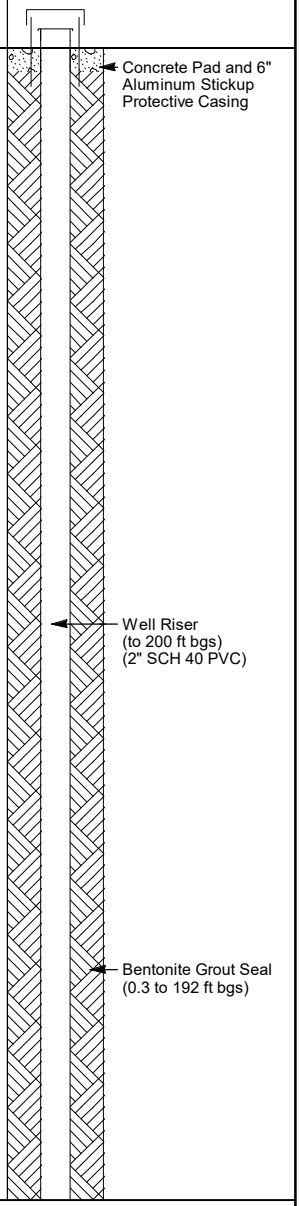
Client: Gavin Power, LLC
Project Name: Residual Waste Landfill Monitoring Well Installation
Project Number: 0488799
Project Location: Cheshire, OH

DATE STARTED: 11/19/2019
DATE COMPLETED: 11/26/2019
DRILLING CONTRACTOR: Frontz Drilling, Inc.
DRILLING METHODS: Sonic Drilling/ Rock Coring
LOGGED BY: L. Velasquez
CHECKED BY: H. Usle
NOTES: Steel casing (6") advanced to 188 ft bgs; 4" rock coring to termination depth.

TOTAL DEPTH: 238 ft bgs
DIAMETER: 4-6 inches
GROUND ELEVATION: 747.77 ft amsl (approx.)
PVC ELEVATION: 750.77 ft amsl
NORTHING: 349139.275
EASTING: 2099336.769

WELL DEVELOPMENT
METHOD(S): PVC Bailer, Grundfos & Buffalo Pump
DATE STARTED: 4/22/2020
DATE ENDED: 5/22/2020
DTW AT START: 162.0 ft bgs
DTW AT END: 206.0 ft bgs
VOLUME PURGED: 17.7 gallons

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
5	743				SC		
10	738						Overburden and Bedrock logging not conducted from ground surface to 188 ft bgs.
15	733						



SAMPLE TYPE
- Sonic Drilling
- Wireline Rock Coring

GRAPHIC LOG LEGEND
- SHALE / Shale
- SANDSTONE / Sandstone

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Project Number: 0488799 **Project Location:** Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
20	728	SC					Overburden and Bedrock logging not conducted from ground surface to 188 ft bgs. *(continued)*	Well Riser (to 200 ft bgs) (2" SCH 40 PVC)
								Bentonite Grout Seal (0.3 to 192 ft bgs)
25	723	SC						
30	718							

SAMPLE TYPE

- Sonic Drilling
- Wireline Rock Coring

GRAPHIC LOG LEGEND

- SHALE Shale
- SANDSTONE Sandstone

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DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
35	713	SC						
40	708						Overburden and Bedrock logging not conducted from ground surface to 188 ft bgs. *(continued)*	Well Riser (to 200 ft bgs) (2" SCH 40 PVC)
45	703	SC						Bentonite Grout Seal (0.3 to 192 ft bgs)
50	698							

SAMPLE TYPE

- Sonic Drilling
- Wireline Rock Coring

GRAPHIC LOG LEGEND

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- SANDSTONE Sandstone

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WELL 2019-09

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Project Number: 0488799 **Project Location:** Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
55	693	SC					Overburden and Bedrock logging not conducted from ground surface to 188 ft bgs. *(continued)*	Well Riser (to 200 ft bgs) (2" SCH 40 PVC)
60	688							Bentonite Grout Seal (0.3 to 192 ft bgs)
65	683	SC						

SAMPLE TYPE

- Sonic Drilling
- Wireline Rock Coring

GRAPHIC LOG LEGEND

- SHALE Shale
- SANDSTONE Sandstone

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Project Number: 0488799
Project Location: Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
70	678							
75	673	SC					Overburden and Bedrock logging not conducted from ground surface to 188 ft bgs. *(continued)*	Well Riser (to 200 ft bgs) (2" SCH 40 PVC); Bentonite Grout Seal (0.3 to 192 ft bgs)
80	668							
85	663	SC						

SAMPLE TYPE

- Sonic Drilling
- Wireline Rock Coring

GRAPHIC LOG LEGEND

- SHALE — Shale
- SANDSTONE — Sandstone

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Project Location: Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
90	658							Well Riser (to 200 ft bgs) (2" SCH 40 PVC)
95	653	SC					Overburden and Bedrock logging not conducted from ground surface to 188 ft bgs. *(continued)*	Bentonite Grout Seal (0.3 to 192 ft bgs)
100	648							

SAMPLE TYPE

- Sonic Drilling
- Wireline Rock Coring

GRAPHIC LOG LEGEND

- SHALE Shale
- SANDSTONE Sandstone

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Project Number: 0488799 **Project Location:** Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
105	643	SC						
110	638						Overburden and Bedrock logging not conducted from ground surface to 188 ft bgs. *(continued)*	Well Riser (to 200 ft bgs) (2" SCH 40 PVC); Bentonite Grout Seal (0.3 to 192 ft bgs)
115	633	SC						
120	628							

SAMPLE TYPE

- Sonic Drilling
- Wireline Rock Coring

GRAPHIC LOG LEGEND

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- SANDSTONE Sandstone

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Project Number: 0488799 **Project Location:** Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
125	623	SC					Overburden and Bedrock logging not conducted from ground surface to 188 ft bgs. *(continued)*	Well Riser (to 200 ft bgs) (2" SCH 40 PVC); Bentonite Grout Seal (0.3 to 192 ft bgs)
130	618							
135	613	SC						

SAMPLE TYPE

- Sonic Drilling
- Wireline Rock Coring

GRAPHIC LOG LEGEND

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- SANDSTONE Sandstone

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Project Number: 0488799 **Project Location:** Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
140	608							
145	603	SC					Overburden and Bedrock logging not conducted from ground surface to 188 ft bgs. *(continued)*	Well Riser (to 200 ft bgs) (2" SCH 40 PVC)
150	598							Bentonite Grout Seal (0.3 to 192 ft bgs)
155	593	SC						

SAMPLE TYPE

- Sonic Drilling
- Wireline Rock Coring

GRAPHIC LOG LEGEND

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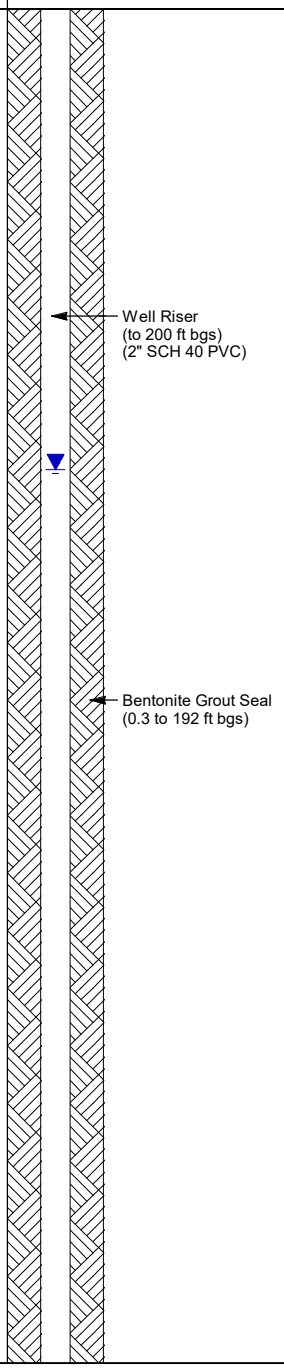
Project Location: Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
160	588						
165	583	SC					Overburden and Bedrock logging not conducted from ground surface to 188 ft bgs. *(continued)*
170	578						



SAMPLE TYPE

- Sonic Drilling
- Wireline Rock Coring

GRAPHIC LOG LEGEND

- SHALE Shale
- SANDSTONE Sandstone

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WELL 2019-09

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Project Number: 0488799 **Project Location:** Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
175	573	SC						
180	568						Overburden and Bedrock logging not conducted from ground surface to 188 ft bgs. *(continued)*	Well Riser (to 200 ft bgs) (2" SCH 40 PVC)
185	563	SC						Bentonite Grout Seal (0.3 to 192 ft bgs)
							188.0	
190	558						NO RECOVERY.	
							190.5	
							Grayish Green, SHALE, massive, moderate strength, fresh, competent.	

SAMPLE TYPE

- Sonic Drilling
- Wireline Rock Coring

GRAPHIC LOG LEGEND

- SHALE / Shale
- SANDSTONE / Sandstone

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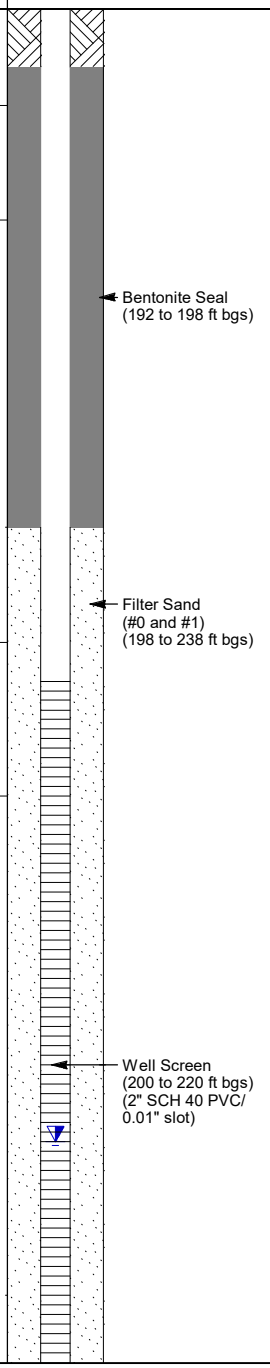
Project Location: Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
		RC (1)	94.8	43			Grayish Green, SHALE, massive, moderate strength, fresh, competent. *(continued)*
							192.5
							Grayish Green, SANDSTONE, fine-grained, massive, fresh, competent.
							194.0
195	553						Grayish Green, SHALE, massive, moderate strength, fresh, competent.
							198.0
							Grayish Green, SHALE, massive, moderate strength, fresh, competent.
							199.5
200	548						Grayish Green, SANDSTONE, massive, possible horizontal joint at approximately 200 ft bgs (rough fractured surface).
							201.5
		RC (2)	120	64			Grayish Green, SHALE, massive, moderate strength, fresh, competent.
205	543						
							208.0
							Grayish Green, SHALE, laminated, weak, fresh, easily crumbled.



SAMPLE TYPE

- Sonic Drilling
- Wireline Rock Coring

GRAPHIC LOG LEGEND

- SHALE / Shale
- SANDSTONE / Sandstone

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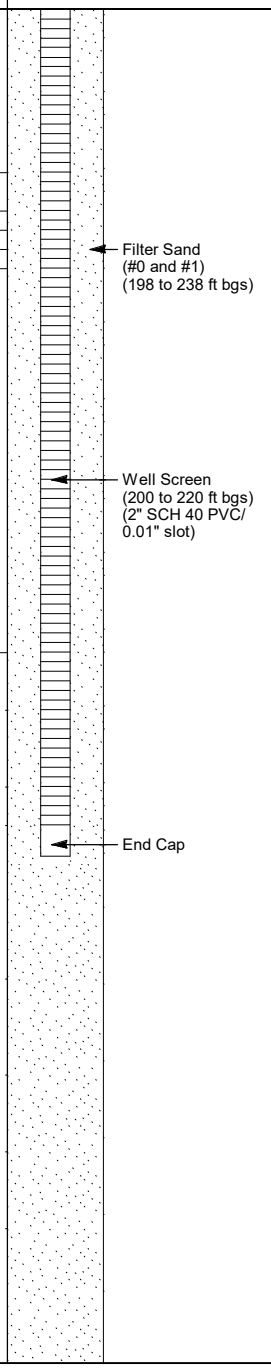
Project Number: 0488799 **Project Location:** Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
210	538						Grayish Green, SHALE, laminated, weak, fresh, easily crumbled. *(continued)*
							211.0
							Grayish Green, SANDSTONE, with silt, very fine-grained, competent.
							211.5
							211.8 Grayish Green, SHALE, very weak.
							212.0 Grayish Green, SANDSTONE, with silt, very fine-grained, competent.
							212.3 Grayish Green, SHALE, laminated, weak, fresh, easily crumbled.
		RC (3)	120	10			
215	533						Grayish Green, SANDSTONE, with silt, very fine-grained, fresh, competent, closely spaced joints from 216 to 217 ft bgs, rough fracture surface.
							217.3
							Grayish Green, SHALE, very weak, easily crumbled.
							218.0
							Grayish Green, SHALE, laminated, very weak, easily crumbled.
							219.0
							Grayish Green, SHALE, strong, fresh, competent.
							219.5
220	528						Grayish Green, SHALE, laminated, very weak, easily crumbled.
							221.5
							Grayish Green, SHALE, strong, fresh, competent.
							222.8
		RC (4)	120	20			Grayish Green, SHALE, strong, fresh, competent.
							223.8
							Grayish Green, SHALE, tight, strong, fresh, competent, possible joint, horizontal, rough texture.
							224.8
225	523						Grayish Green, SHALE, moderate strength, fresh, competent, broken fragments.

WELL DIAGRAM



SAMPLE TYPE

- Sonic Drilling
- Wireline Rock Coring

GRAPHIC LOG LEGEND

- SHALE / Shale
- SANDSTONE / Sandstone

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WELL 2019-09

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Project Number: 0488799 **Project Location:** Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
							Grayish Green, SHALE, moderate strength, fresh, competent, broken fragments. *(continued)*	
							228.0	
							Grayish Green, SHALE, very weak, clayey clusters of fragments, easily crumbled.	
							229.6	
230	518						Grayish Green, SHALE, moderate to strong, fresh, competent.	← Filter Sand (#0 and #1) (198 to 238 ft bgs)
							231.6	
							Grayish Green, SHALE, strong, fresh, competent.	
							232.6	
		RC (5)	120	66			Grayish Green, SHALE, laminated, weak to moderate, fresh, competent.	
							234.5	
235	513						Grayish Green, SHALE, very weak, easily crumbled.	
							238.0	
240	508						*Bottom of Boring @ 238.00 feet bgs*	

SAMPLE TYPE

- Sonic Drilling
- Wireline Rock Coring

GRAPHIC LOG LEGEND

- SHALE Shale
- SANDSTONE Sandstone

ACRONYM LEGEND

amsl = above mean sea level
bgs = below ground surface
ft = feet
DTW = depth to water
NA = not applicable
NM = not measured
NR = no recovery
PVC = polyvinyl chloride
U.S.C.S. = Unified Soil Classification System

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER

COMPANY

PROJECT **GAVIN FGD CONVERSION PROJECT**

COORDINATES **N 345,099.1 E 2,103,287.5**

GROUND ELEVATION **612.0** SYSTEM **STATE PLANE**

Water Level, ft	▽ 25.9	▼ 10.2	▼ 5.7
TIME	0700	2:30	7:30
DATE	7-7-94	7-11-94	7-12-94

BORING NO. **R-93100** DATE **11/24/10** SHEET **1** OF **5**

BORING START **7/6/94** BORING FINISH **7/20/94**

PIEZOMETER TYPE WELL TYPE **OW**

HGT. RISER ABOVE GROUND **2.04** DIA **2.0**

DEPTH TO TOP OF WELL SCREEN **72.1** BOTTOM **111.0**

WELL DEVELOPMENT **SEE NOTES** BACKFILL **VOLCLAY**

FIELD PARTY **TJH RLY** RIG **CME-75**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	USCS	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
1	SS	0.0	2.0	1-2-8-6	1.2					**BROWN GRAY CLAY** Moist,fill.		Hole was drilled using a 5 7/8" roller bit.
2	SS	2.0	4.0	5-8-10-14	1.0					**BROWN RED SANDY CLAY** Moist fill.		
3	SS	4.0	6.0	5-7-17-14	1.0					**RED CLAY** Moist ,shale,fill.		
4	SS	6.0	8.0	5-6-7-9	1.2		5			**MULTI-COLORED RED AND BROWN CLAY** Moist,fill.	▼	
5	SS	8.0	10.0	2-3-5-7	.8					**MULTI-COLORED BROWN CLAY** Moist,fill.		
6	SS	10.0	12.0	1-2-3-5	1.0		10			**REDDISH BROWN CLAY** Moist,fill.	▼	
7	SS	12.0	14.0	3-5-6-9	1.2					**MULTI-COLORED BROWN AND GRAY SANDY CLAY** Moist, trace of gravel.		
8	SS	14.0	16.0	4-6-7-9	1.2							
9	SS	16.0	18.0	4-4-5-6	1.5		15			**DARK GRAY CLAY** Moist to wet natural material.		
10	SS	18.0	20.0	3-4-5-7	1.6					**BROWN AND GRAY CLAY** Moist.		

TYPE OF CASING USED

X	NQ-2 ROCK CORE	
	6" x 3.25 HSA	
X	9" x 6.25 HSA	
	HW CASING ADVANCER	4"
	NW CASING	3"
	SW CASING	6"
	AIR HAMMER	8"

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PIEZOMETER TYPE: PT = OPEN TUBE POROUS TIP, SS = OPEN TUBE SLOTTED SCREEN, G = GEONOR, P = PNEUMATIC

WELL TYPE: OW = OPEN TUBE SLOTTED SCREEN, GM = GEOMON

RECORDER **RLY**

AEP R1R2.GPJ AEP.GDT 11/24/10

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER _____

COMPANY _____ BORING NO. **R-93100** DATE **11/24/10** SHEET **2** OF **5**

PROJECT **GAVIN FGD CONVERSION PROJECT** BORING START **7/6/94** BORING FINISH **7/20/94**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
11	SS	20.0	22.0	3-3-5-8	2.0							
12	SS	22.0	24.0	3-5-5-5	2.0					**GRAY CLAY** Moist to wet.		
13	SS	24.0	26.0	2-4-5-6	2.0					**GRAY CLAY** Wet to moist.		
							25					
14	SS	26.0	28.0	4-6-12-13	1.5					**RED CLAYSTONE** Weathered, moist.		
15	SS	28.0	30.0	10-14-24-40	1.4							
16	SS	30.0	31.0	24-50	.6		30					
17	NQ	31.0	34.8		3.8	100				**RED CLAYSTONE** Soft.		
										GRAY AND RED SANDY SHALE Soft.		
18	NQ	34.8	44.8		9.7	87	35			**GRAY SANDSTONE** Fine grain, well cemented, hard with vertical cracks 36.2 to 37.1 broken clay on joint.		
										RED AND GRAY SANDY SHALE Medium soft.		
										RED CLAYSTONE Soft.		
							40			**GRAY SANDSTONE** Hard, well cemented, clay on joint, pyrite.		
19	NQ	44.8	49.8		5.0	96	45			**RED AND GRAY CLAYSTONE** Medium soft.		

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AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER _____

COMPANY _____ BORING NO. **R-93100** DATE **11/24/10** SHEET **3** OF **5**

PROJECT **GAVIN FGD CONVERSION PROJECT** BORING START **7/6/94** BORING FINISH **7/20/94**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
										GRAY SHALE Medium soft, large amount pyrite.		
										RED CLAY SHALE Medium hard.		
20	NQ	49.8	54.8		5.0	100	50					
										RED AND LIGHT BROWN CLAYSTONE With limestone nodules.		
21	NQ	54.8	59.8		5.0	96	55					
22	NQ	59.8	64.8		5.0	84	60			**RED TO LIGHT GRAY CLAY SHALE** Well cemented.		61.6 Top bentonite seal.
23	NQ	64.8	69.8		5.0	74	65			**68.2 to 68.4 soft**		68.4 Top of sand.
24	NQ	69.8	74.8		4.9		70			**RED CLAY SHALE** Well cemented, medium hard.		

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AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER _____

COMPANY _____ BORING NO. **R-93100** DATE **11/24/10** SHEET **4** OF **5**

PROJECT **GAVIN FGD CONVERSION PROJECT** BORING START **7/6/94** BORING FINISH **7/20/94**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
										GRAY SILTY CLAY SHALE Well cemented, medium hard.		72.1 Top screen.
25	NQ	74.8	79.8		4.9	76	75			**LIGHT GRAY TO RED CLAY SHALE** Well cemented, medium hard.		
26	NQ	79.8	84.8		4.7	84	80			**LIGHT GRAY AND RED CLAY SHALE** Medium hard, well cemented.		
27	NQ	84.8	89.8		5.0	58	85			**RED CLAYSTONE** Medium hard.		
28	NQ	89.8	94.8		5.0		90					
29	NQ	94.8	104.8		10.0	100	95					

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AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER _____

COMPANY _____ BORING NO. **R-93100** DATE **11/24/10** SHEET **5** OF **5**

PROJECT **GAVIN FGD CONVERSION PROJECT** BORING START **7/6/94** BORING FINISH **7/20/94**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	SAMPLE DEPTH IN FEET TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
							100			**GRAY SILTY LIMESTONE** Medium hard , well cemented some pyrite.		
										GRAY SILTY SHALE		
										GRAY SILTY SANDSTONE		
										GRAY SILTY CLAY SHALE		
30	NQ	104.8	113.7		8.1		105			**RED AND GRAY SHALE** Medium hard.		
										GRAY SHALEY SANDSTONE Hard.		
							110					111.0 Bottom of screen.
										GRAY SHALE Medium hard.		113.5 Bottom of sand.
										8-4-94 DEVELOPED WELL AND PURGED DRY. **9-07-94 SWL 14.18 8:58 PURGED DRY 9:30** **9-08-94 56 56** **pH 7.80 7.85** **COND 1445 1386** **PUMP INSTALLED 8-04-94 AT APPROXIMATELY 110.5'** **WELL WAS DEVELOPED USING A RED-FLO PUMP CONTINUOUS FLOW**		

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER _____

COMPANY _____

PROJECT **GAVIN FGD CONVERSION PROJECT**

COORDINATES **N 345,307.0 E 2,104,199.8**

GROUND ELEVATION **716.7** SYSTEM **STATE PLANE**

Water Level, ft	▽ 20.8	▼ 88.4	▽
TIME	8:20	1:30	
DATE	8-6-93	8-9-93	

BORING NO. **R-93108** DATE **11/24/10** SHEET **1** OF **7**

BORING START **8/4/93** BORING FINISH **8/10/93**

PIEZOMETER TYPE _____ WELL TYPE **OW**

HGT. RISER ABOVE GROUND **1.69** DIA **2.0**

DEPTH TO TOP OF WELL SCREEN **129.9** BOTTOM **149.9**

WELL DEVELOPMENT **SEE NOTES** BACKFILL **VOLCLAY**

FIELD PARTY **TJH-GCF** RIG **CME-75**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	USCS	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
1	SS	4.2	5.7	6-7-13	.9		5			**GRAY/BROWN SILTY SHALE** Road bed,dry.		Hole drilled using a 5 7/8" roller bit.
2	SS	9.2	10.7	11-17-19	.5		10			**GRAY SHALE** Mica,dry.		Well 9398 bottom of screen 83.90.
3	SS	14.2	15.7	7-5-8	.8		15			**BROWN/GRAY SILTY SHALE** Dry.		Well 93108 bottom of screen 149.9.
4	SS	19.2	20.1	26-50/.3	.6					**GRAY SHALE** Dry.		

TYPE OF CASING USED

X	NQ-2 ROCK CORE	
X	6" x 3.25 HSA	
	9" x 6.25 HSA	
	HW CASING ADVANCER	4"
	NW CASING	3"
X	SW CASING	6"
	AIR HAMMER	8"

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PIEZOMETER TYPE: PT = OPEN TUBE POROUS TIP, SS = OPEN TUBE SLOTTED SCREEN, G = GEONOR, P = PNEUMATIC

WELL TYPE: OW = OPEN TUBE SLOTTED SCREEN, GM = GEOMON

RECORDER _____

AEP R1R2.GPJ AEP.GDT 11/24/10

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER

COMPANY

BORING NO. **R-93108** DATE **11/24/10** SHEET **2** OF **7**

PROJECT **GAVIN FGD CONVERSION PROJECT** BORING START **8/4/93** BORING FINISH **8/10/93**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
5	NQ	22.5	30.4		7.9	87				**GRAY SHALE** Weathered,soft to medium.		
							25			**COAL**		
										GRAY SHALE Weathered,soft to medium.		
6	NQ	30.4	35.4		5.0	56	30					
										BLACK SHALEY COAL Medium to hard.		
7	NQ	35.4	43.5		8.0	72	35			**GRAY SHALE** Weathered.		
										GRAY LIMESTONE Hard.		
							40			**MULTI-COLORED RED/GRAY/GREEN SHALE** Weathered,soft to medium.		
8	NQ	43.5	45.4		1.9	57						
							45					
9	NQ	45.4	55.1		7.0							

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AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER _____

COMPANY _____ BORING NO. **R-93108** DATE **11/24/10** SHEET **3** OF **7**

PROJECT **GAVIN FGD CONVERSION PROJECT** BORING START **8/4/93** BORING FINISH **8/10/93**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
							50					50.0 Top of bentonite seal.
										GRAY SHALEY SANDSTONE Mica.		
10	NQ	55.1	65.4		10.2	96	55					55.0 Top of gravel pack. Partial loss of drill water.
							60					2000 gallons of water used.
										GREEN SANDY SHALE Weathered,medium.		
										GRAY/RED/GREEN SHALE Weathered,medium.		
11	NQ	65.4	75.4		9.7	91	65					64.55 Top of screen. Water return back to normal.
							70					

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AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER _____

COMPANY _____ BORING NO. **R-93108** DATE **11/24/10** SHEET **4** OF **7**

PROJECT **GAVIN FGD CONVERSION PROJECT** BORING START **8/4/93** BORING FINISH **8/10/93**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
							75					
12	NQ	75.4	85.4		9.4	89						
							80			**GRAY SANDY SHALE** Medium to hard.		4000 gallons of water used.
										GRAY/RED/GREEN SHALE Weathered,medium changing to soft to medium at 85.4.		83.90 Bottom of screen.
13	NQ	85.4	95.4		10.0	89	85					86.10 Bottom of gravel pack.
							90					
							95					
14	NQ	95.4	105.4		10.0	66						

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AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER _____

COMPANY _____ BORING NO. **R-93108** DATE **11/24/10** SHEET **5** OF **7**

PROJECT **GAVIN FGD CONVERSION PROJECT** BORING START **8/4/93** BORING FINISH **8/10/93**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
							100					
							105					
15	NQ	105.4	110.4		4.3	11						
							110					
16	NQ	110.4	115.4		3.4	17						
							115					
17	NQ	115.4	124.8		8.7	21						6000 gallons of water used.
							120					123.0 Top of bentonite seal.

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AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER _____

COMPANY _____ BORING NO. **R-93108** DATE **11/24/10** SHEET **6** OF **7**

PROJECT **GAVIN FGD CONVERSION PROJECT** BORING START **8/4/93** BORING FINISH **8/10/93**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
~~18~~	~~NQ~~	~~124.8~~	~~134.7~~		~~9.0~~		125					8000 gallons of water used.
												128.50 Top of gravel pack.
							130			**DARK GRAY SANDSTONE**		129.9 Top of screen.
										RED/MULTI-COLOR SHALE		
~~19~~	~~NQ~~	~~134.7~~	~~143.0~~		~~8.3~~	~~86~~	135			**RED CLAY SHALE** Hard.		
20	NQ	143.0	145.4		100	91	140					
21	NQ	145.4	155.4		9.9		145			**GRAY CLAY SHALE**		
										GRAY SANDSTONE		

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AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER _____

COMPANY _____ BORING NO. **R-93108** DATE **11/24/10** SHEET **7** OF **7**

PROJECT **GAVIN FGD CONVERSION PROJECT** BORING START **8/4/93** BORING FINISH **8/10/93**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
												149.9 Bottom of screen.
										GRAY SANDY SHALE Hard.		
												152.0 Top of bentonite seal.
										RED/GRAY CLAY SHALE Hard.		
							155					155.4 Bottom of boring.
										6-8-94 SWL 120.02 **8-24-94 SWL 98.22** **8-25-94 SWL 99.04** **8-29-94 SWL 123.07** **8-30-94 PURGED WELL DRY** **8-31-94 TEMP 60 59** **COND 2460 2480** **pH 7.69 7.84** **9-3-94 SWL 121.1** **PUMP INSTALLED 8-2-94 APPROXIMATELY 148.4** **WELL WAS DEVELOPED USING A RED-FLO CONTINUOUS FLOW PUMP.**		

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER

COMPANY

PROJECT **GAVIN FGD CONVERSION PROJECT**

COORDINATES **N 347,038.0 E 2,104,957.2**

GROUND ELEVATION **594.0** SYSTEM **STATE PLANE**

Water Level, ft			
TIME			
DATE			

BORING NO. **R-94136** DATE **11/24/10** SHEET **1** OF **6**

BORING START **8/30/94** BORING FINISH **9/8/94**

PIEZOMETER TYPE WELL TYPE **OW**

HGT. RISER ABOVE GROUND DIA **2.0**

DEPTH TO TOP OF WELL SCREEN **75.4** BOTTOM **114.5**

WELL DEVELOPMENT **SEE NOTE** BACKFILL **VOLCLAY**

FIELD PARTY **TJH-RLY** RIG **CME-75**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	USCS	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
1	SS	0.0	1.5	8-8-8	.9					**BROWN CLAY** Moist.		Hole was drilled using a 8" air hammer.
2	SS	1.5	3.0	5-8-8	1.0							
3	SS	3.0	4.0	6-8-11	.7							
4	SS	4.5	6.0	4-4-4	.8		5					
5	SS	6.0	7.5	3-3-7	1.1							
6	SS	7.5	9.0	4-5-8								
7	SS	9.0	10.5	3-6-7	.6							
8	SS	10.5	12.0	4-4-6	.9		10					
9	SS	12.0	13.5	5-7-7	.7					**LIGHT BROWN CLAY** Moist.		
10	SS	13.5	15.0	5-9-11	.8					**TOP .04 LIGHT BROWN CLAY** With trace of lignite.		
										GRAY SAND Moist.		
11	SS	15.0	16.5	8-9-14	1.1		15			**BROWN CLAYEY SAND** Moist.		
12	SS	16.5	18.0	7-8-9	1.1					**BROWN CLAY** With sandstone gravel (mine spoil?)		
13	SS	18.0	19.5	4-5-5	.9							
14	SS	19.5	21.0	3-3-4	.7							

TYPE OF CASING USED

X	NQ-2 ROCK CORE	
X	6" x 3.25 HSA	
X	9" x 6.25 HSA	
	HW CASING ADVANCER	4"
	NW CASING	3"
	SW CASING	6"
	AIR HAMMER	8"

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PIEZOMETER TYPE: PT = OPEN TUBE POROUS TIP, SS = OPEN TUBE SLOTTED SCREEN, G = GEONOR, P = PNEUMATIC

WELL TYPE: OW = OPEN TUBE SLOTTED SCREEN, GM = GEOMON

RECORDER **RLY**

AEP R1R2.GPJ AEP.GDT 11/24/10

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER _____

COMPANY _____ BORING NO. **R-94136** DATE **11/24/10** SHEET **2** OF **6**

PROJECT **GAVIN FGD CONVERSION PROJECT** BORING START **8/30/94** BORING FINISH **9/8/94**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
15	SS	21.0	22.5	3-3-5	.8					**BROWN CLAY** Moist.		
16	SS	22.5	24.0	3-3-4	1.0					**BROWN SAND** Well graded, oxidized wet.		
17	SS	24.0	25.5	2-3-4	.8		25			**BROWN CLAY** Moist.		
18	SS	25.5	27.0	3-5-6	1.1							
19	SS	27.0	28.5	4-4-4	1.0							
20	SS	28.5	30.0	2-4-4								
21	SS	30.0	31.5	3-5-6	1.2		30			**BROWN CLAYEY SILT** Moist.		
22	SS	31.5	33.0	3-3-4	1.1							
23	SS	33.0	34.5	3-3-5	1.2							
24	SS	34.5	36.0	3-4-6	1.0					**GRAY CLAY** Moist.		
25	SS	36.0	37.5	3-3-4	1.3		35					
26	SS	37.5	39.0	3-5-7						**BROWN CLAYEY SILT** Moist		
27	SS	39.0	40.5	3-5-8	1.2							
28	SS	40.5	42.0	3-5-5	1.2		40			**GRAY SILTY CLAY** Moist.		
29	SS	42.0	43.5	2-4-4	1.1							
30	SS	43.5	45.0	2-2-3	1.2							
31	SS	45.0	46.5	2-2-4	1.0		45					

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AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER _____

COMPANY _____ BORING NO. **R-94136** DATE **11/24/10** SHEET **3** OF **6**

PROJECT **GAVIN FGD CONVERSION PROJECT** BORING START **8/30/94** BORING FINISH **9/8/94**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
32	SS	46.5	48.0	3-4-6	1.2							
33	SS	48.0	49.5	3-3-6	.9							
34	SS	49.5	51.0	2-4-4	.9		50					
35	SS	51.0	52.5	3-4-5	1.1							
36	SS	52.5	54.0	3-4-4	1.2							
37	SS	54.0	55.5	3-5-6	1.1		55					
38	SS	55.5	57.0	4-6-6	1.2							
39	SS	57.0	58.5	2-3-4	.9							
40	SS	59.5	61.0	3-3-7	1.1		60					
41	SS	61.0	62.5	6-6-6	.9							
42	SS	62.5	64.0	4-4-6	1.2							
43	SS	64.0	65.5	3-5-5	1.1		65					
44	SS	65.5	67.0	3-3-5								
45	SS	67.0	68.5	4-5-5								
46	SS	68.5	70.0	5-12-12	1.2					**TOP OF SAMPLE GRAY SILTY CLAY** **BOTTOM SAND AND SHALE GRAY**		
47	SS	70.0	71.5	12-16-16	0		70					69.1 Top of bentonite seal.
48	SS	71.5	73.0	16-15-24	0							

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AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER _____

COMPANY _____ BORING NO. **R-94136** DATE **11/24/10** SHEET **4** OF **6**

PROJECT **GAVIN FGD CONVERSION PROJECT** BORING START **8/30/94** BORING FINISH **9/8/94**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
49	NQ	74.2	80.0		5.8	74	75			**GRAY CLAY SHALE** Hard.		74.5 Top of sand. 75.4 Top of screen.
										GRAY SANDSTONE		
50	NQ	80.0	85.0		5.0	70	80					
										GRAY CLAY SHALE		
51	NQ	85.0	95.0		10.0	0	85					
							90					
52	NQ	95.0	105.0		10.0	39	95					

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AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER _____

COMPANY _____ BORING NO. **R-94136** DATE **11/24/10** SHEET **5** OF **6**

PROJECT **GAVIN FGD CONVERSION PROJECT** BORING START **8/30/94** BORING FINISH **9/8/94**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
							100			**DARK REDDISH BROWN CLAY SHALE**		
53	NQ	105.0	110.0		5.0	60	105					
54	NQ	110.0	115.0		5.0	92	110					
55	NQ	115.0	120.0		5.0	92	115					114.5 Bottom of screen. 116.0 Bottom of sand.
										GRAY SANDY SHALE		
56	NQ	120.0	125.0		5.0	74	120			**REDDISH BROWN CLAY SHALE**		

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AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER _____

COMPANY _____ BORING NO. **R-94136** DATE **11/24/10** SHEET **6** OF **6**

PROJECT **GAVIN FGD CONVERSION PROJECT** BORING START **8/30/94** BORING FINISH **9/8/94**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
							125					
57	NQ	125.0	130.0		5.0	54				**GRAY CLAY SHALE**		
58	NQ	130.0	135.0		5.0	86	130			**REDDISH BROWN CLAY SHALE**		
							135			**10-6-94 SWL 27.3 PURGED DRY** **10-7-94 SWL 27.8** **10-7-94 TEMP 58 58** **COND 1859 1849** **pH 7.34 7.45** **PUMP INSTALLED 10-6-94 APPROXIMATELY 114.0'** **WELL WAS DEVELOPED USING A RED-FLO CONTINUOUS FLOW PUMP**		135.0 Bottom of seal.

AEP R1R2.GPJ AEP.GDT 11/24/10

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER

COMPANY

PROJECT **GAVIN FGD CONVERSION PROJECT**

COORDINATES **N 347,033.7 E 2,104,959.4**

GROUND ELEVATION **594.0** SYSTEM **STATE PLANE**

Water Level, ft	▽ **21.6**	▼	▼
TIME			
DATE	**9-6-94**		

BORING NO. **R-94137** DATE **11/24/10** SHEET **1** OF **6**

BORING START **9/6/94** BORING FINISH **9/7/94**

PIEZOMETER TYPE WELL TYPE **OW**

HGT. RISER ABOVE GROUND DIA **2.0**

DEPTH TO TOP OF WELL SCREEN **40.0** BOTTOM **48.9**

WELL DEVELOPMENT **SEE NOTES** BACKFILL **VOLCLAY**

FIELD PARTY **TJH-REY** RIG **CME-75**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	USCS	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
							5			**BROWN CLAY** Moist.		Hole was drilled using a 5 7/8" roller bit.
							10			**LIGHT BROWN CLAY** Moist.		
										TOP .04 LIGHT BROWN CLAY With trace of lignite.		
										GRAY SAND Moist.		
							15			**BROWN CLAYEY SAND** Moist.		
										BROWN CLAY With sandstone gravel (mine spoil?)		

TYPE OF CASING USED

	NQ-2 ROCK CORE	
	6" x 3.25 HSA	
X	9" x 6.25 HSA	
	HW CASING ADVANCER	4"
	NW CASING	3"
	SW CASING	6"
	AIR HAMMER	8"

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PIEZOMETER TYPE: PT = OPEN TUBE POROUS TIP, SS = OPEN TUBE SLOTTED SCREEN, G = GEONOR, P = PNEUMATIC

WELL TYPE: OW = OPEN TUBE SLOTTED SCREEN, GM = GEOMON

RECORDER **REY**

AEP R1R2.GPJ AEP.GDT 11/24/10

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER _____

COMPANY _____ BORING NO. **R-94137** DATE **11/24/10** SHEET **2** OF **6**

PROJECT **GAVIN FGD CONVERSION PROJECT** BORING START **9/6/94** BORING FINISH **9/7/94**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
										BROWN CLAY Moist.		
										BROWN SAND Well graded, oxidized wet.		
										BROWN CLAY Moist.		
							25					
							30			**BROWN CLAYEY SILT** Moist.		33.3 Top bentonite seal.
							35			**GRAY CLAY** Moist.		36.0 Top of gravel.
										BROWN CLAYEY SILT Moist		
							40			**GRAY SILTY CLAY** Moist.		40.0 Top of screen.
							45					

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AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER _____

COMPANY _____ BORING NO. **R-94137** DATE **11/24/10** SHEET **3** OF **6**

PROJECT **GAVIN FGD CONVERSION PROJECT** BORING START **9/6/94** BORING FINISH **9/7/94**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
							50					48.9 Bottom of screen. 50.0 Bottom of gravel.
							55					
							60					
							65			**TOP OF SAMPLE GRAY SILTY CLAY** **BOTTOM SAND AND SHALE GRAY**		
							70					

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AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER _____

COMPANY _____ BORING NO. **R-94137** DATE **11/24/10** SHEET **4** OF **6**

PROJECT **GAVIN FGD CONVERSION PROJECT** BORING START **9/6/94** BORING FINISH **9/7/94**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
							75			**GRAY CLAY SHALE** Hard.		
										GRAY SANDSTONE		
							80					
										GRAY CLAY SHALE		
							85					
							90					
							95					

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AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER _____

COMPANY _____ BORING NO. **R-94137** DATE **11/24/10** SHEET **5** OF **6**

PROJECT **GAVIN FGD CONVERSION PROJECT** BORING START **9/6/94** BORING FINISH **9/7/94**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
							100			**DARK REDDISH BROWN CLAY SHALE**		
							105					
							110					
							115					
							120			**GRAY SANDY SHALE**		
										REDDISH BROWN CLAY SHALE		

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AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER _____

COMPANY _____ BORING NO. **R-94137** DATE **11/24/10** SHEET **6** OF **6**

PROJECT **GAVIN FGD CONVERSION PROJECT** BORING START **9/6/94** BORING FINISH **9/7/94**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
							125			**GRAY CLAY SHALE**		
							130			**REDDISH BROWN CLAY SHALE**		
							135			**10-6-94 SWL 28.92 PUMPED DRY** **10-7-94 SWL 30.52** **TEMP 58 58** **COND 1092 1099** **pH 7.09 7.03** **PUMP WAS INSTALLED 10-6-94** **APPROXIMATELY 48.4'** **WELL WAS DEVELOPED USING A RED-FLO** **CONTINUOUS PUMP**		

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER

COMPANY

PROJECT **GAVIN FGD CONVERSION PROJECT**

COORDINATES **N 345,099.4 E 2,103,292.9**

GROUND ELEVATION **612.0** SYSTEM **STATE PLANE**

Water Level, ft	▽	▼	▼
TIME			
DATE			

BORING NO. **R-94139** DATE **11/24/10** SHEET **1** OF **5**

BORING START **7/21/94** BORING FINISH **7/21/94**

PIEZOMETER TYPE WELL TYPE **OW**

HGT. RISER ABOVE GROUND DIA **2.0**

DEPTH TO TOP OF WELL SCREEN **40.0** BOTTOM **58.9**

WELL DEVELOPMENT **SEE NOTES** BACKFILL **VOLCLAY**

FIELD PARTY **TJH REY** RIG **CME-75**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	USCS	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
										BROWN GRAY CLAY Moist,fill.		9.25" HSA TO 31.0' AND 5 7/8" ROLLER BIT TO 61.0'.
										BROWN RED SANDY CLAY Moist fill.		
										RED CLAY Moist ,shale,fill.		
							5			**MULTI-COLORED RED AND BROWN CLAY** Moist,fill.		
										MULTI-COLORED BROWN CLAY Moist,fill.		
							10			**REDDISH BROWN CLAY** Moist,fill.		
										MULTI-COLORED BROWN AND GRAY SANDY CLAY Moist, trace of gravel.		
							15			**DARK GRAY CLAY** Moist to wet natural material.		
										BROWN AND GRAY CLAY Moist.		

TYPE OF CASING USED

	NQ-2 ROCK CORE	
	6" x 3.25 HSA	
X	9" x 6.25 HSA	
	HW CASING ADVANCER	4"
	NW CASING	3"
	SW CASING	6"
	AIR HAMMER	8"

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PIEZOMETER TYPE: PT = OPEN TUBE POROUS TIP, SS = OPEN TUBE SLOTTED SCREEN, G = GEONOR, P = PNEUMATIC

WELL TYPE: OW = OPEN TUBE SLOTTED SCREEN, GM = GEOMON

RECORDER **REY**

AEP R1R2.GPJ AEP.GDT 11/24/10

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER _____

COMPANY _____ BORING NO. **R-94139** DATE **11/24/10** SHEET **2** OF **5**

PROJECT **GAVIN FGD CONVERSION PROJECT** BORING START **7/21/94** BORING FINISH **7/21/94**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
							25			**GRAY CLAY** Moist to wet.		
										GRAY CLAY Wet to moist.		
										RED CLAYSTONE Weathered, moist.		
							30			**RED CLAYSTONE** Soft.		31.0 Top of bentonite seal.
							35			**GRAY AND RED SANDY SHALE** Soft.		
										GRAY SANDSTONE Fine grain, well cemented, hard with vertical cracks 36.2 to 37.1 broken clay on joint.		37.3 Top of sand.
										RED AND GRAY SANDY SHALE Medium soft.		
							40			**RED CLAYSTONE** Soft.		40.0 Top of screen.
										GRAY SANDSTONE Hard, well cemented, clay on joint, pyrite.		
							45			**RED AND GRAY CLAYSTONE** Medium soft.		

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AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER _____

COMPANY _____ BORING NO. **R-94139** DATE **11/24/10** SHEET **3** OF **5**

PROJECT **GAVIN FGD CONVERSION PROJECT** BORING START **7/21/94** BORING FINISH **7/21/94**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	SAMPLE DEPTH IN FEET TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
							50			**GRAY SHALE** Medium soft, large amount pyrite.		
										RED CLAY SHALE Medium hard.		
							55			**RED AND LIGHT BROWN CLAYSTONE** With limestone nodules.		58.9 Bottom of screen.
							60			**RED TO LIGHT GRAY CLAY SHALE** Well cemented.		61.0 Bottom of sand.
							65			**68.2 to 68.4 soft**		
							70			**RED CLAY SHALE** Well cemented, medium hard.		

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AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER _____

COMPANY _____ BORING NO. **R-94139** DATE **11/24/10** SHEET **4** OF **5**

PROJECT **GAVIN FGD CONVERSION PROJECT** BORING START **7/21/94** BORING FINISH **7/21/94**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
							75			**GRAY SILTY CLAY SHALE** Well cemented, medium hard.		
										LIGHT GRAY TO RED CLAY SHALE Well cemented, medium hard.		
							80			**LIGHT GRAY AND RED CLAY SHALE** Medium hard, well cemented.		
							85			**RED CLAYSTONE** Medium hard.		
							90					
							95					

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AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER _____

COMPANY _____ BORING NO. **R-94139** DATE **11/24/10** SHEET **5** OF **5**

PROJECT **GAVIN FGD CONVERSION PROJECT** BORING START **7/21/94** BORING FINISH **7/21/94**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
										GRAY SILTY LIMESTONE Medium hard , well cemented some pyrite.		
							100			**GRAY SILTY SHALE**		
										GRAY SILTY SANDSTONE		
										GRAY SILTY CLAY SHALE		
							105			**RED AND GRAY SHALE** Medium hard.		
										GRAY SHALEY SANDSTONE Hard.		
							110			**GRAY SHALE** Medium hard.		
										8-25-94 SWL 14.19 10:11 AM **9-7-94 SWL 13.83 7:30 AM** **DEVELOPED, PURGED DRY** **9-8-94 SWL 14.95** **TEMP 59 57** **COND 1216 1219** **pH 7.25 7.48** **WELL DEVELOPED USING A RED-FLO CONTINUOUS FLOW PUMP** **PUMP INSTALLED 9-25-94 AT APPROXIMATELY 58.5'**		

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER **1477**

COMPANY **OHIO POWER COMPANY**

PROJECT **GAVIN FGD RETROFIT PROJECT**

COORDINATES **N 349,605.8 E 2,103,045.0**

GROUND ELEVATION **609.8** SYSTEM **State Plane using NADA27**

Water Level, ft	▽ 30.9	▼	▼
TIME			
DATE	11-12-98		

BORING NO. **R-9801** DATE **11/24/10** SHEET **1** OF **6**

BORING START **11/10/98** BORING FINISH **12/3/98**

PIEZOMETER TYPE **N\A** WELL TYPE **OW**

HGT. RISER ABOVE GROUND **1.6** DIA **2.0**

DEPTH TO TOP OF WELL SCREEN **109.4** BOTTOM **129.0**

WELL DEVELOPMENT **Yes** BACKFILL **Quick grout**

FIELD PARTY **TJH-REB** RIG **CME-75**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	USCS	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
1	SS	2.4		2-3-4	1.2				CL	**BROWN SANDY CLAY** Moist.		
2	SS	7.4	8.9	4-5-7	1.1		5					
3	SS	12.4	13.9	4-7-7	1.2		10					
4	SS	17.4	18.9	4-5-7	1.1		15		CL	**RED AND BROWN SANDY CLAY**		

TYPE OF CASING USED

X	NQ-2 ROCK CORE	
X	6" x 3.25 HSA	
	9" x 6.25 HSA	
	HW CASING ADVANCER	4"
	NW CASING	3"
	SW CASING	6"
X	AIR HAMMER	8"

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PIEZOMETER TYPE: PT = OPEN TUBE POROUS TIP, SS = OPEN TUBE SLOTTED SCREEN, G = GEONOR, P = PNEUMATIC

WELL TYPE: OW = OPEN TUBE SLOTTED SCREEN, GM = GEOMON

RECORDER **REB**

AEP_GAVIN_FGD_BORINGS.GPJ AEP.GDT 11/24/10

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER **1477**

COMPANY **OHIO POWER COMPANY** BORING NO. **R-9801** DATE **11/24/10** SHEET **2** OF **6**

PROJECT **GAVIN FGD RETROFIT PROJECT** BORING START **11/10/98** BORING FINISH **12/3/98**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
5	SS	22.4	23.9	2-4-5	1.2				CL	**RED SANDY CLAY** Soft.		
6	SS	27.4	28.9	3-5-7	1.2		25		CL	**BROWN AND GRAY SANDY CLAY** Dry		
7	SS	32.4	33.9	3-4-6	1.1		30		CL	**MULTICOLORED RED GRAY BROWN SANDY CLAY** Moist.		
8	SS	37.4	38.9	4-7-10	1.2		35		CL	**RED, BROWN SANDY CLAY** Moist.		
9	SS	42.4	43.9	13-25-33	1.2		40			**MULTICOLORED RED, GRAY, YELLOWISH BROWN CLAY SHALE**		
							45					

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AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER **1477**

COMPANY **OHIO POWER COMPANY** BORING NO. **R-9801** DATE **11/24/10** SHEET **3** OF **6**

PROJECT **GAVIN FGD RETROFIT PROJECT** BORING START **11/10/98** BORING FINISH **12/3/98**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
10	SS	47.4	48.9	30-30-30	1.2					**RED AND GRAY CLAY SHALE** Dry , weathered.		
11	NQ-2	48.9	55.0		6.0	100	50			**MULTICOLORED RED, GRAY, YELLOWISH BROWN CLAY SHALE**		
12	NQ-2	55.0	59.5		3.3	100	55			**RED AND BROWN CLAY SHALE**		
13	NQ-2	59.5	68.7		3.1	35	60			**10R-4\2 GRAYISH RED CLAY SHALE**		
14	NQ-2	68.7	70.0		1.1	100	65			**RED AND GRAY CLAY SHALE**		
15	NQ-2	70.0	75.0		3.5	100	70			**10R 4\2 GRAYISH RED CLAY SHALE** **MULTICOLORED RED, GRAY, BROWN CLAY SHALE**		

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AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER **1477**

COMPANY **OHIO POWER COMPANY** BORING NO. **R-9801** DATE **11/24/10** SHEET **4** OF **6**

PROJECT **GAVIN FGD RETROFIT PROJECT** BORING START **11/10/98** BORING FINISH **12/3/98**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
16	NQ-2	75.0	80.0		5.0	48	75			**N5 MEDIUM GRAY CLAY SHALE** Pyrite. **N5 MEDIUM GRAY LIMESTONE** **10R 4\2 GRAYISH RED CLAY SHALE** **N5 MEDIUM GRAY CLAY SHALE**		
17	NQ-2	80.0	85.0		5	44	80			**N5 MEDIUM GRAY SANDY CLAY SHALE** With .3 limestone at 81.3'.		
18	NQ-2	85.0	95.0		10	75	85			**N5 MEDIUM GRAY CLAY SHALE** Soft clay seam at 94.1 to 94.7.		
							90					
19	NQ-2	95.0	101.5		6.4	60	95					

Continued Next Page

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER **1477**

COMPANY **OHIO POWER COMPANY** BORING NO. **R-9801** DATE **11/24/10** SHEET **5** OF **6**

PROJECT **GAVIN FGD RETROFIT PROJECT** BORING START **11/10/98** BORING FINISH **12/3/98**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
												98.0 top of bentonite seal.
20	NQ-2	101.5	105.0		3.5	88	100			**MULTICOLORED REDDISH, GREENISH,MEDIUM GRAY CLAY SHALE**		
										N5 MEDIUM GRAY CLAY SHALE		104.4 top of sand.
21	NQ-2	105.0	111.7		6.6	37	105					
										N5 MEDIUM GRAY CLAY SHALE Soft.		109.4 top of screen.
22	NQ-2	111.7	118.9		4	0	110			**REDDISH BROWN CLAY SHALE** Soft, small .5-1.0 mm pyrite common just above limestone.		
23	NQ-2	118.9	120.0		1.1	100	115			**N5 MEDIUM GRAY LIMESTONE**		
24	NQ-2	120.0	125.0		3.9	58	120			**N5 MEDIUM GRAY SANDY SHALE**		
										N5 MEDIUM GRAY SANDSTONE		
										N5 MEDIUM GRAY SHALEY SANDSTONE		
										N5 MEDIUM GRAY CLAY SHALE		

Continued Next Page

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER **1477**

COMPANY **OHIO POWER COMPANY** BORING NO. **R-9801** DATE **11/24/10** SHEET **6** OF **6**

PROJECT **GAVIN FGD RETROFIT PROJECT** BORING START **11/10/98** BORING FINISH **12/3/98**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
							125			**10R 4\6 MODERATE REDDISH BROWN CLAY SHALE**		
25	NQ-2	125.0	130.0		4.3	46				**N7 LIGHT GRAY CLAY SHALE**		129 bottom of screen.
							130					130 bottom of well.
												131 bottom of sand.

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER **1477**

COMPANY **OHIO POWER COMPANY** BORING NO. **R-9802** DATE **11/24/10** SHEET **2** OF **2**

PROJECT **GAVIN FGD RETROFIT PROJECT** BORING START **12/1/98** BORING FINISH **12/2/98**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
6	SS	27.9	29.4	4.4.7	1.2				CL	**GRAY SANDY CLAY** Soft.		
7	SS	32.9	34.4	5.11.15	1.2		30		CL	**GRAY AND BROWN CLAY** Stiff.		
8	SS	37.9	39.4	6.9.12	1.1		35			**MULTI COLORED RED, GRAY, BROWNISH YELLOWISH WEATHERED CLAY SHALE.**		35 top of bentonite seal. 37 top of sand. 39 top of screen.
9	SS	42.9	44.4	5.7.9	1.1		40					
10	SS	47.9	49.4	15.25.30	1.1		45			**MULTI COLORED RED, GRAY, BROWN SANDY CLAY** With embedded gravel, moist.		48.5 bottom of screen. 49.6 bottom of well. 50 bottom of sand.
							50					

AEP GAVIN_FGD_BORINGS.GPJ AEP.GDT 11/24/10

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER **1477**

COMPANY **OHIO POWER COMPANY**

PROJECT **GAVIN FGD RETROFIT PROJECT**

COORDINATES **N 349,056.1 E 2,103,324.6**

GROUND ELEVATION **718.3** SYSTEM **State Plane using NADA27**

Water Level, ft	▽	▼	▼
TIME			
DATE			

BORING NO. **R-9806** DATE **11/24/10** SHEET **1** OF **7**

BORING START **12/22/98** BORING FINISH **12/29/98**

PIEZOMETER TYPE **N\A** WELL TYPE **OW**

HGT. RISER ABOVE GROUND **2.0** DIA **2.0**

DEPTH TO TOP OF WELL SCREEN **111.0** BOTTOM **140.0**

WELL DEVELOPMENT **Yes** BACKFILL **Quick grout**

FIELD PARTY **TJH-REB** RIG **CME-75**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
										See boring R-9805 for lithology.		

5

10

15

TYPE OF CASING USED

X	NQ-2 ROCK CORE	
X	6" x 3.25 HSA	
	9" x 6.25 HSA	
	HW CASING ADVANCER	4"
	NW CASING	3"
	SW CASING	6"
X	AIR HAMMER	8"

Continued Next Page

PIEZOMETER TYPE: PT = OPEN TUBE POROUS TIP, SS = OPEN TUBE SLOTTED SCREEN, G = GEONOR, P = PNEUMATIC

WELL TYPE: OW = OPEN TUBE SLOTTED SCREEN, GM = GEOMON

RECORDER **TJH**

AEP_GAVIN_FGD_BORINGS.GPJ AEP.GDT 11/24/10

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER **1477**

COMPANY **OHIO POWER COMPANY** BORING NO. **R-9806** DATE **11/24/10** SHEET **2** OF **7**

PROJECT **GAVIN FGD RETROFIT PROJECT** BORING START **12/22/98** BORING FINISH **12/29/98**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
							25					
							30					
							35					
							40					
							45					

Continued Next Page

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER **1477**

COMPANY **OHIO POWER COMPANY** BORING NO. **R-9806** DATE **11/24/10** SHEET **3** OF **7**

PROJECT **GAVIN FGD RETROFIT PROJECT** BORING START **12/22/98** BORING FINISH **12/29/98**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	SAMPLE DEPTH IN FEET TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
							50					
							55					
							60					
							65					
							70					

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AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER **1477**

COMPANY **OHIO POWER COMPANY** BORING NO. **R-9806** DATE **11/24/10** SHEET **4** OF **7**

PROJECT **GAVIN FGD RETROFIT PROJECT** BORING START **12/22/98** BORING FINISH **12/29/98**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
							75					
							80					
							85					
							90					
							95					

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AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER **1477**

COMPANY **OHIO POWER COMPANY** BORING NO. **R-9806** DATE **11/24/10** SHEET **5** OF **7**

PROJECT **GAVIN FGD RETROFIT PROJECT** BORING START **12/22/98** BORING FINISH **12/29/98**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	SAMPLE DEPTH IN FEET TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
							100					
							105					103.5 Top of bentonite seal.
							110					108.2 Top of sand pack.
							115					111.0 Top of screen.
							120					

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AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER **1477**

COMPANY **OHIO POWER COMPANY** BORING NO. **R-9806** DATE **11/24/10** SHEET **6** OF **7**

PROJECT **GAVIN FGD RETROFIT PROJECT** BORING START **12/22/98** BORING FINISH **12/29/98**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
							125					
							130					
							135					
							140					140.0 Bottom of screen.
												141.0 Bottom of well and sand.
							145					149.4 Bottom of

Continued Next Page

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER **1477**

COMPANY **OHIO POWER COMPANY** BORING NO. **R-9806** DATE **11/24/10** SHEET **7** OF **7**

PROJECT **GAVIN FGD RETROFIT PROJECT** BORING START **12/22/98** BORING FINISH **12/29/98**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
												bentonite seal.

AEP GAVIN_FGD_BORINGS.GPJ AEP.GDT 11/24/10

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

MONITORING WELL CONSTRUCTION

JOB NUMBER WO#0820

COMPANY OHIO POWER COMPANY

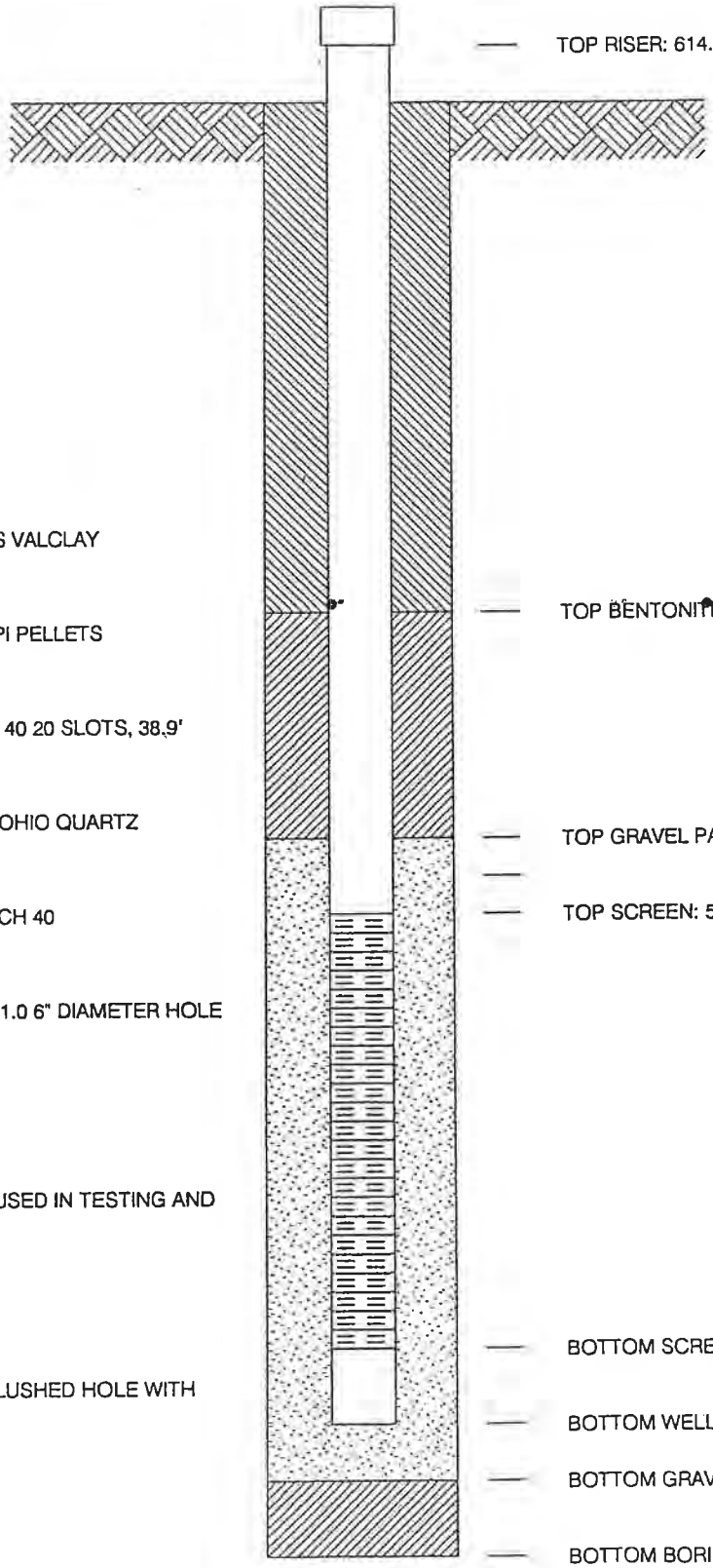
WELL No. R-93100 BORING No. R-93100 INSTALLED 07/20/94

PROJECT GAVIN FGD RETROFIT PROJECT

COORDINATES N 345,099.1 E 2,103,287.5

SYSTEM STATE PLANE

GROUND ELEVATION 612.00 FT



GROUT SEAL: 100 GALLONS VALCLAY

BENTONITE SEAL: 75 LBS. PI PELLETS

SCREEN: 2.0 DIA., PVC SCH 40 20 SLOTS, 38.9'

GRAVEL PACK: 800 LBS #4 OHIO QUARTZ

RISER PIPE: 2.0, dia., PVC SCH 40

COMMENTS: 6.25 HSA TO 31.0 6" DIAMETER HOLE
31.0 TO 114.0

6000 GALLONS OF WATER USED IN TESTING AND REAMING HOLE.

SPIDERS 111.0-72.0-35.0.. FLUSHED HOLE WITH 750-1000 GALLONS

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

MONITORING WELL CONSTRUCTION

JOB NUMBER WO#0820

COMPANY OHIO POWER COMPANY

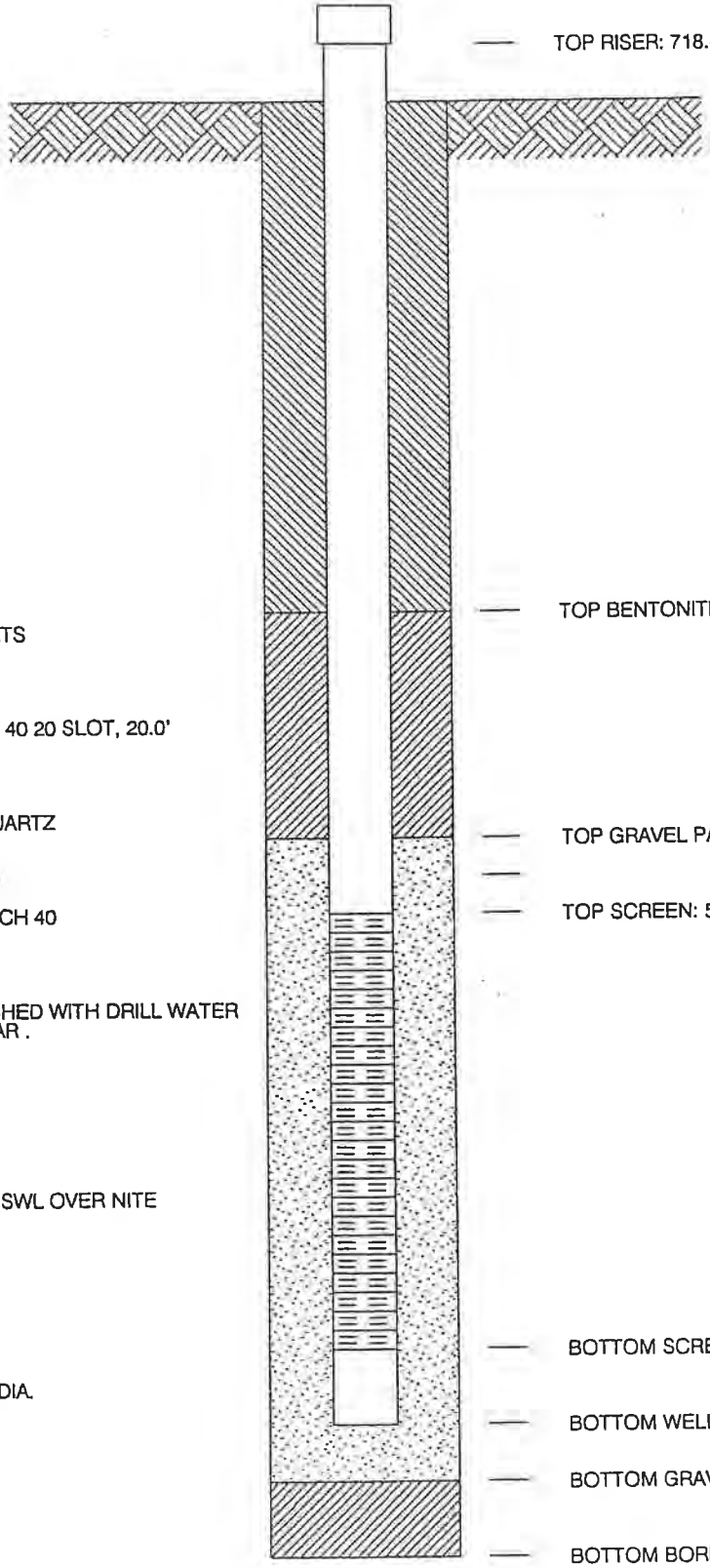
WELL No. R-93108 BORING No. R-93108 INSTALLED 08/10/93

PROJECT GAVIN FGD RETROFIT PROJECT

COORDINATES N 345,307.0 E 2,104,199.8

SYSTEM STATE PLANE

GROUND ELEVATION 716.72 FT.



GROUT SEAL: VOLCLAY

BENTONITE SEAL: PI PELLETS

SCREEN: 2.0 DIA., PVC SCH 40 20 SLOT, 20.0'

GRAVEL PACK: #4 OHIO QUARTZ

RISER PIPE: 2.0, dia., PVC SCH 40

COMMENTS: BORING FLUSHED WITH DRILL WATER UNTILL VISUALLY CLEAR .

SPIDERS 150.0,140.0,130.0. SWL OVER NITE 42.2.8-17-93 SWL 16.8

HOLE REAMED TO 5 7/8"D DIA.

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

MONITORING WELL CONSTRUCTION

JOB NUMBER WO#0820

COMPANY OHIO POWER COMPANY

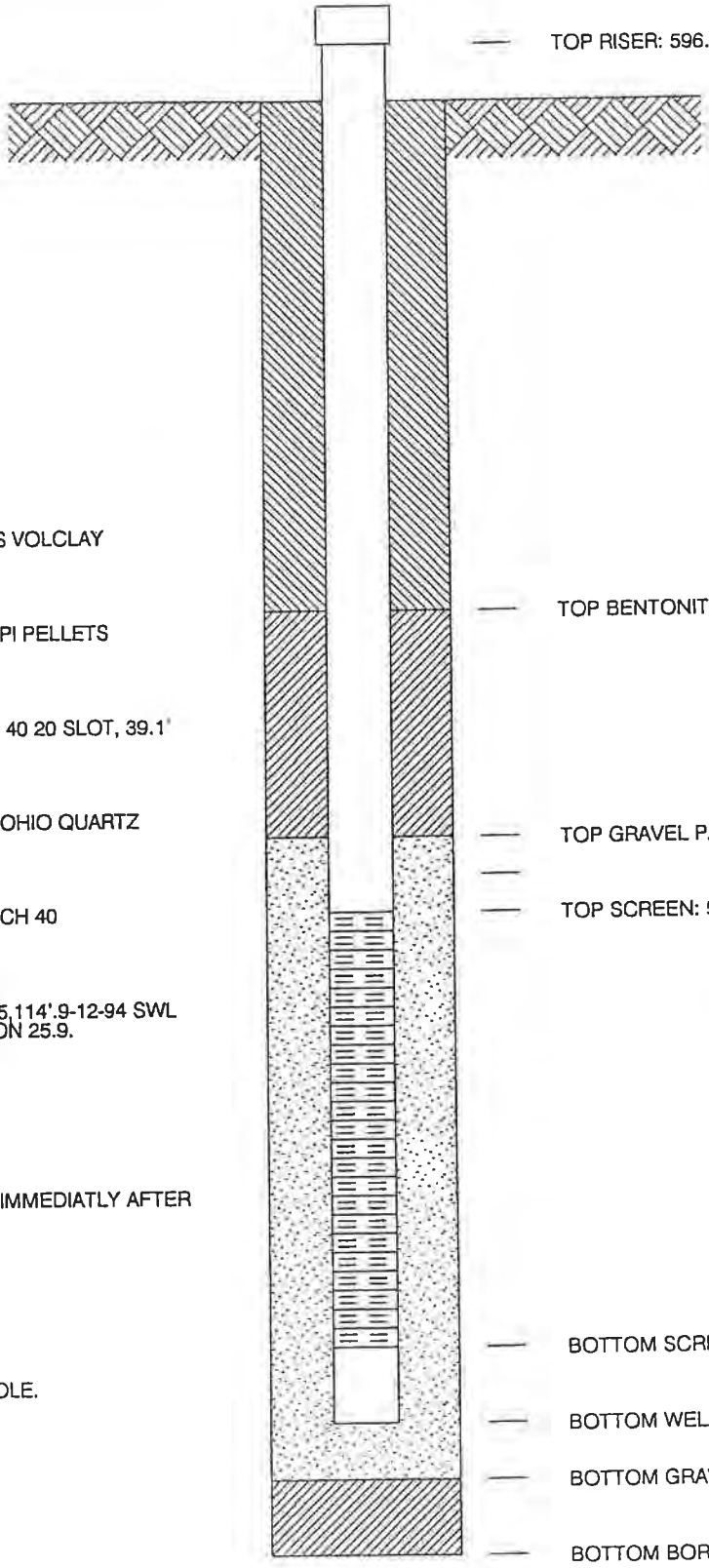
WELL No. R-94136 BORING No. R-94136 INSTALLED 09/08/94

PROJECT GAVIN FGD RETROFIT PROJECT

COORDINATES N 347,038.0 E 2,104,957.2

SYSTEM STATE PLANE

GROUND ELEVATION 594.00 FT.



GROUT SEAL: 450 GALLONS VOLCLAY

BENTONITE SEAL: 150 LBS PI PELLETS

SCREEN: 2.0 DIA., PVC SCH 40 20 SLOT, 39.1'

GRAVEL PACK: 750 LBS #4 OHIO QUARTZ

RISER PIPE: 2.0, dia., PVC SCH 40

COMMENTS: SPIDERS 25,75,114'.9-12-94 SWL PRIOR TO INSTALLATION 25.9.

SWL RECOVERED TO 27.2' IMMEDIATLY AFTER INSTALLATION.

SWL 9-12-94 25.9. 8" DIA. HOLE.

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

MONITORING WELL CONSTRUCTION

JOB NUMBER WO#0820

COMPANY OHIO POWER COMPANY

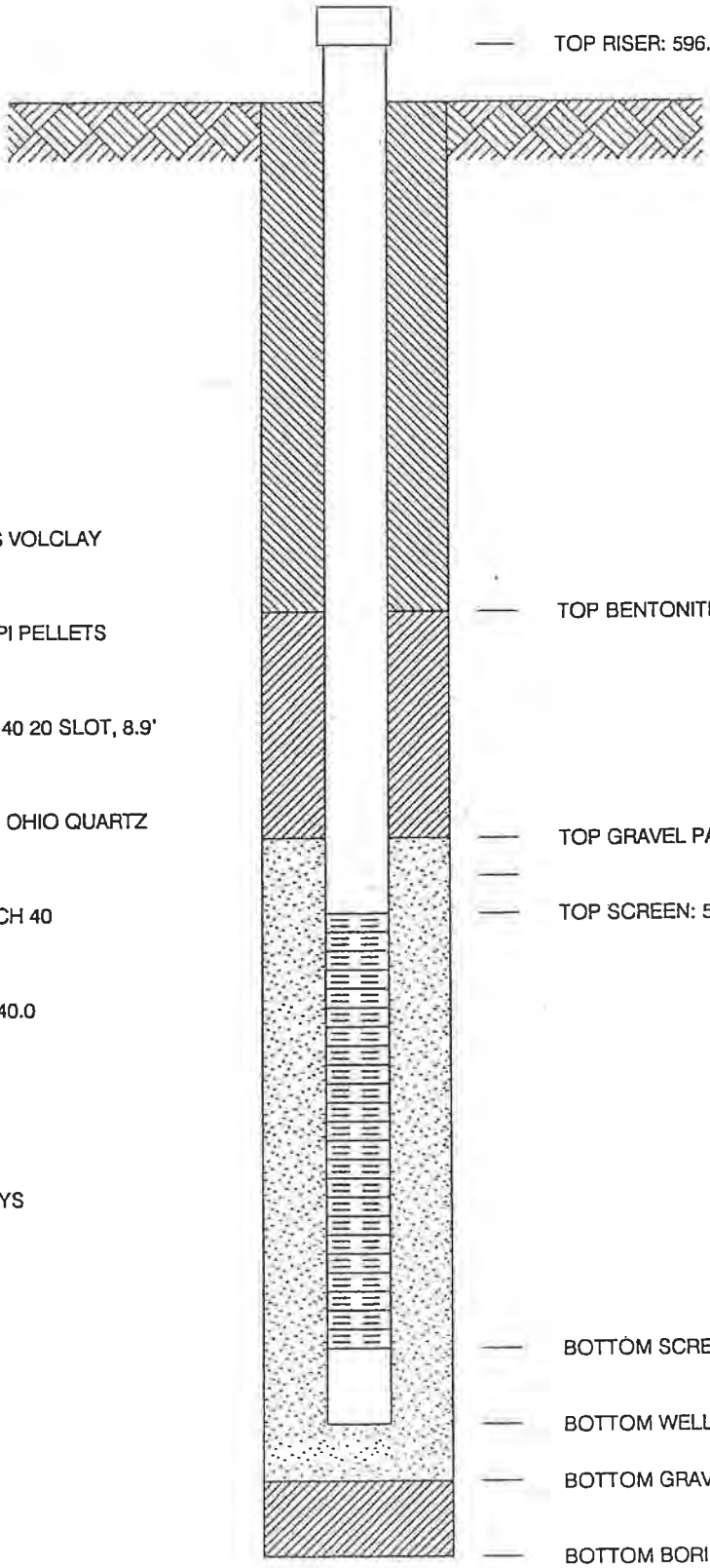
WELL No. R-94137 BORING No. R-94137 INSTALLED 09/07/94

PROJECT GAVIN FGD RETROFIT PROJECT

COORDINATES N 347,033.7 E 2,104,959.4

SYSTEM STATE PLANE

GROUND ELEVATION 594.00 FT



GROUT SEAL: 250 GALLONS VOLCLAY

BENTONITE SEAL: 150 LBS.PI PELLETS

SCREEN: 2.0 DIA., PVC SCH 40 20 SLOT, 8.9'

GRAVEL PACK: 1150 LBS #4 OHIO QUARTZ

RISER PIPE: 2.0, dia., PVC SCH 40

COMMENTS: SPIDERS 49.0,40.0

9-6-94 SWL 21.6 AFTER 5 DAYS

5 7/8" DIA. HOLE.

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

MONITORING WELL CONSTRUCTION

JOB NUMBER WO#0820

COMPANY OHIO POWER COMPANY

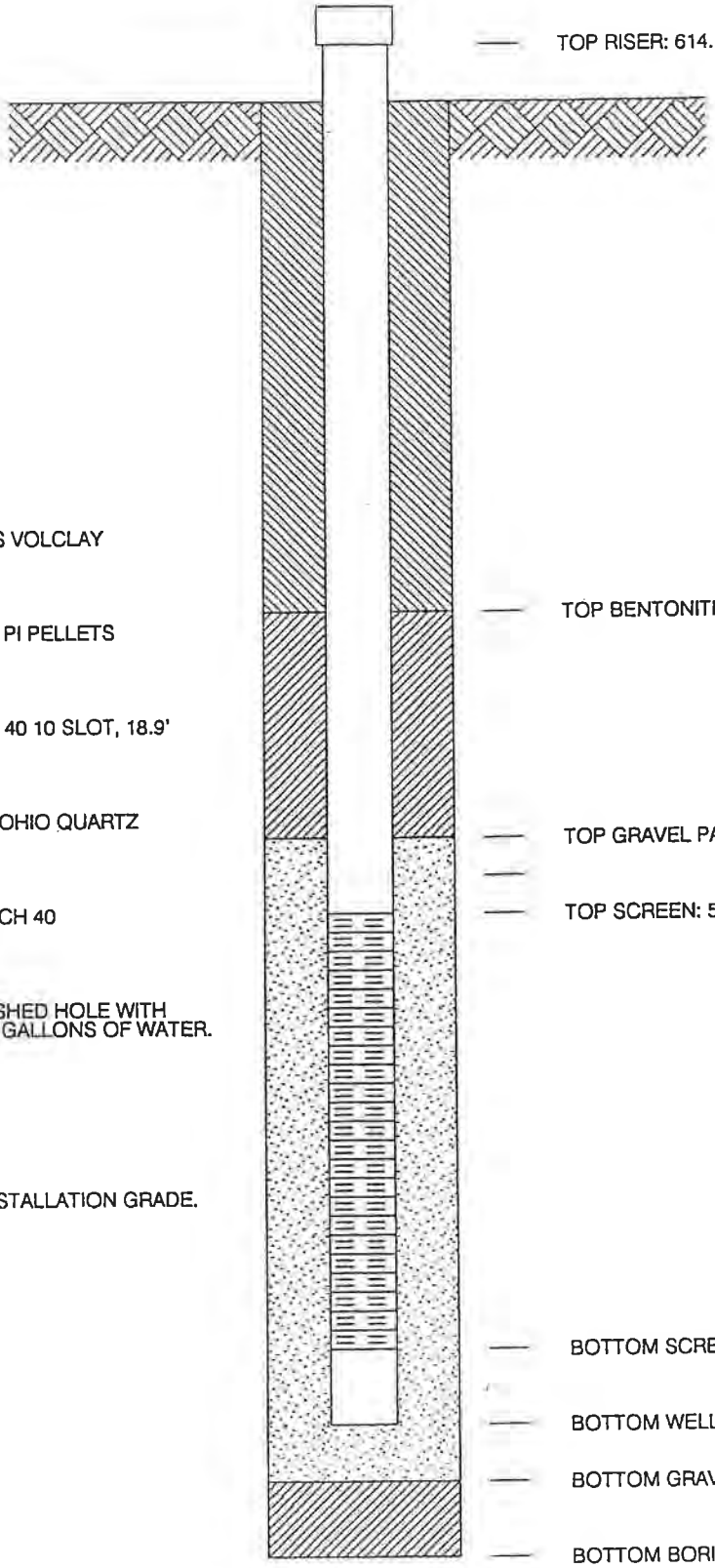
PROJECT GAVIN FGD RETROFIT PROJECT

COORDINATES N 345,099.4 E 2,103,292.9

SYSTEM STATE PLANE

WELL No. R-94139 BORING No. R-94139 INSTALLED 07/21/94

GROUND ELEVATION 612.00 FT



GROUT SEAL: 200 GALLONS VOLCLAY

BENTONITE SEAL: 150 LBS. PI PELLETS

SCREEN: 2.0 DIA., PVC SCH 40 10 SLOT, 18.9'

GRAVEL PACK: 300 LBS #4 OHIO QUARTZ

RISER PIPE: 2.0, dia., PVC SCH 40

COMMENTS: 6" HOLE. FLUSHED HOLE WITH APPROXIMATELY 1000 GALLONS OF WATER.

SPIDERS 40',60'. SWL AT INSTALLATION GRADE.

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

MONITORING WELL CONSTRUCTION

JOB NUMBER 1461

COMPANY OHIO POWER COMPANY

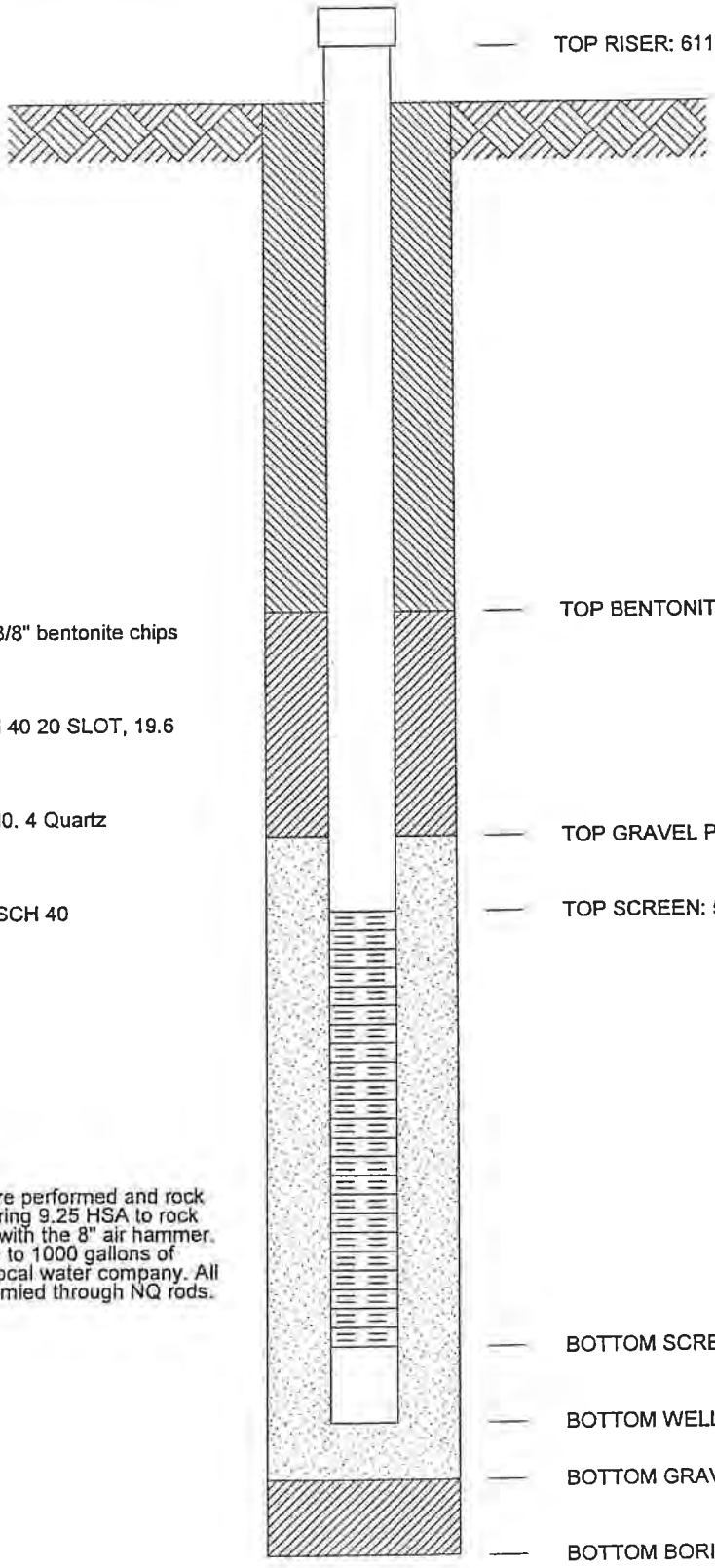
PROJECT GAVIN FGD RETROFIT PROJECT

COORDINATES N 349,605.8 E 210,345.0

SYSTEM State Plane using NADA27

WELL No. R-9801 BORING No. R-9801 INSTALLED 12/3/98

GROUND ELEVATION 609.77 FT.



GROUT SEAL: Quick Grout

BENTONITE SEAL: 150 lbs 3/8" bentonite chips

SCREEN: 2.0 dia., PVC SCH 40 20 SLOT, 19.6

GRAVEL PACK: 1550 Lbs. N0. 4 Quartz

RISER PIPE: 2.0, dia., PVC SCH 40

SPACERS, DEPTH:

Standard penetration test were performed and rock core taken prior to augering 9.25 HSA to rock and advancing the hole with the 8" air hammer. Used approximately 750 to 1000 gallons of potable water from the local water company. All back fill material was tremied through NQ rods.

GEOMCNST R1R2.GPJ FULL.GDT 2/2/99

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

MONITORING WELL CONSTRUCTION

JOB NUMBER 1461

COMPANY OHIO POWER COMPANY

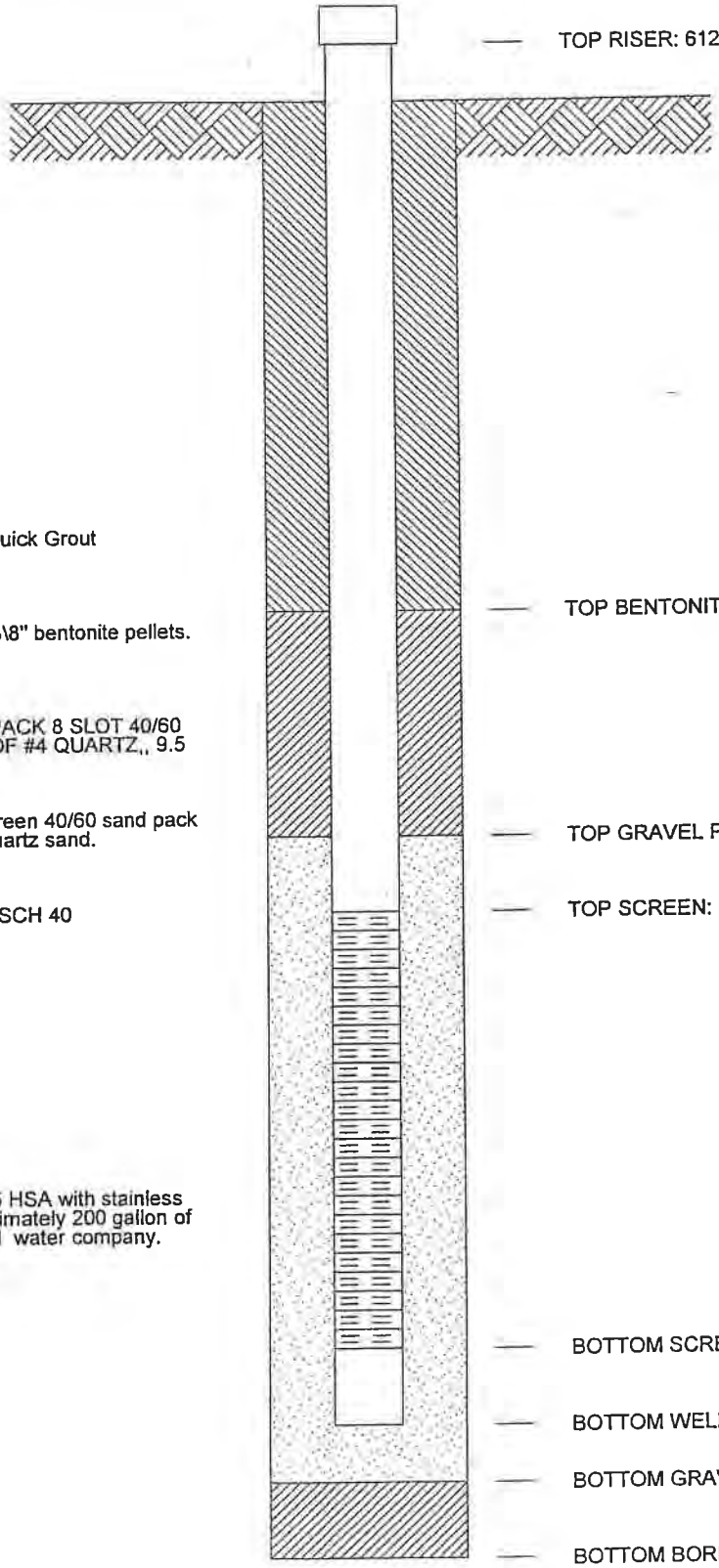
PROJECT GAVIN FGD RETROFIT PROJECT

WELL No. R-9802 BORING No. R-9802 INSTALLED 12/2/98

COORDINATES N 349,620.2 E 2,103,019.8

SYSTEM State Plane using NADA27

GROUND ELEVATION 610.39 FT.



GROUT SEAL: 50 Gallons Quick Grout

BENTONITE SEAL: 75 lbs. 3\8" bentonite pellets.

SCREEN: 4 x 5.2 dia., PREPACK 8 SLOT 40/60 PACK PLUS 400 LBS OF #4 QUARTZ,, 9.5

GRAVEL PACK: Prepack screen 40/60 sand pack with 400 lbs. of No. 4 quartz sand.

RISER PIPE: 4.0, dia., PVC SCH 40

SPACERS, DEPTH:

Well was installed using 9.25 HSA with stainless knock out plate. Approximately 200 gallon of potable water from local water company.

GEOMCNST R1R2.GI: FULL.GDT 2/2/99

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

MONITORING WELL CONSTRUCTION

JOB NUMBER 1461

COMPANY OHIO POWER COMPANY

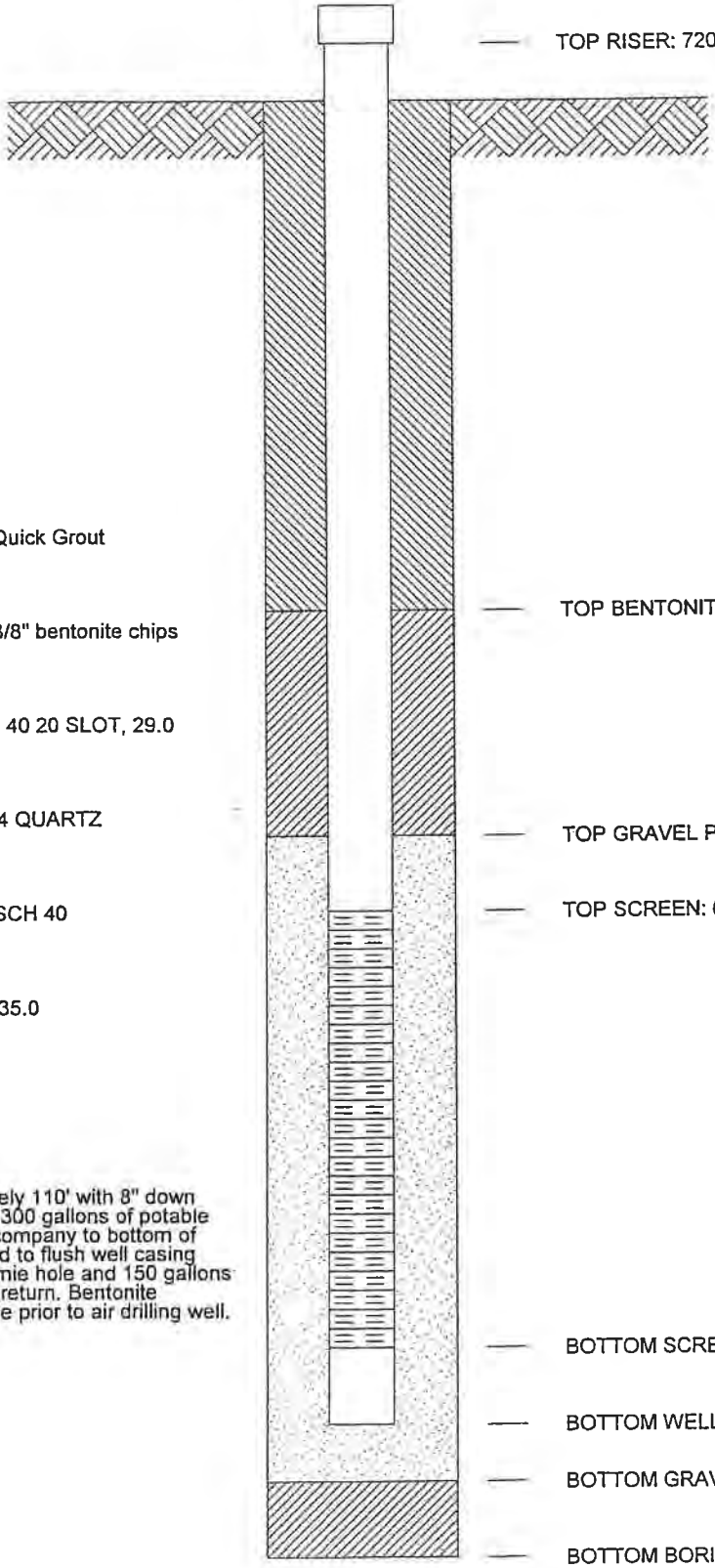
WELL No. R-9806 BORING No. R-9806 INSTALLED 12/29/98

PROJECT GAVIN FGD RETROFIT PROJECT

COORDINATES N 349,056.1 E 2,103,324.6

SYSTEM State Plane using NADA27

GROUND ELEVATION 718.29 FT.



GROUT SEAL: 300 Gallons Quick Grout

BENTONITE SEAL: 150 lbs 3/8" bentonite chips

SCREEN: 2.0 dia., PVC SCH 40 20 SLOT, 29.0

GRAVEL PACK: 1250 LBS #4 QUARTZ

RISER PIPE: 2.0, dia., PVC SCH 40

SPACERS, DEPTH: 116.0, 135.0

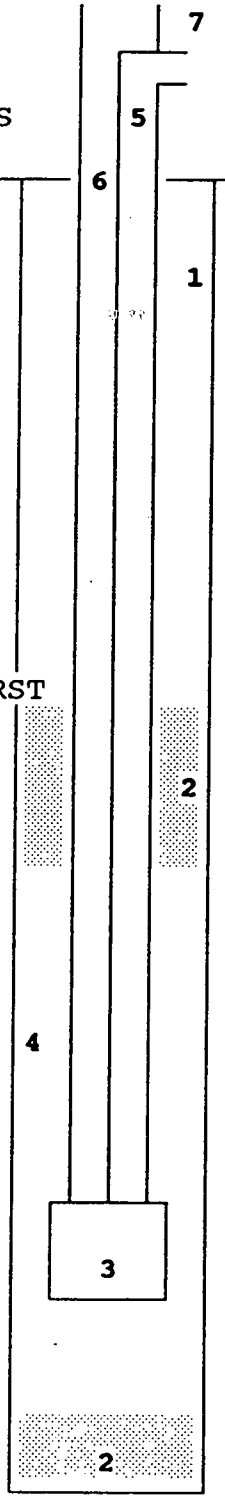
Well drilled dry to approximately 110' with 8" down hole hammer then used 300 gallons of potable water from local water company to bottom of hole. The crew attempted to flush well casing after installation with tremie hole and 150 gallons of potable water with no return. Bentonite backfilled 3' NQ core hole prior to air drilling well.

GEOMCNST R1R2.G_FULL.GDT 2/2/99

COMPANY OPCO GAVIN PLANT
PROJECT FGD LANDFILL
COORDINATES N.348462.47 E.2104474.65 ✓
DATE INSTALLED 2-8-93

WELL CONSTRUCTION SUMMARY ELEVATION (ft. NGVD)
WELL NO. R-9396
REF. DATUM PT. 616.22
GRADE 613.61

NOTE: CASING PROTECTOR DETAILS NOT SHOWN



1 GROUT SEAL
2 BENTONITE SEAL
3 GEOMON UNIT
4 GRAVEL PACK
5 CONTINUOUS UNKINKED NYLON TUBING EXTENDED TO TOP OF CHECK VALUE
6 CASING
7 BRASS 'Y'FITTING
2-9-93 8:40 SWL PRIOR TO FIRST PURGING 7.1.

RECOVERED TO 96.4 .
SWL 8:10 AM 2-10-93 91.6

VOLCLAY GROUT FROM 523.71 TO GRADE.

TOP OF BENTONITE SEAL 523.71

TOP OF GRAVEL PACK 518.62

CHECK VALUE 499.41
TOP OF SCREEN 498.81
BOTTOM OF SCREEN 496.81
GEOMON TIP 496.41

BOTTOM OF GRAVEL PACK 495.61

BOTTOM OF BORE HOLE 492.21

--OTECHNICAL ENGINEERING SECTION
VIL ENGINEERING DESIGN

AMERICAN ELECTRIC POWER SERVICE CORPORATION

GEOMON WELL
CDS-04C

This is log for 9396

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER _____

COMPANY _____

PROJECT **GAVIN FGD CONVERSION PROJECT**

COORDINATES **N 348,462.4 E 2,104,474.6**

GROUND ELEVATION **613.6** SYSTEM _____

Water Level, ft	▽ 19.4	▼	▼
TIME	8:38		
DATE	1-4-93		

BORING NO. **R-93096** DATE **11/24/10** SHEET **1** OF **5**

BORING START **2/2/93** BORING FINISH **2/8/93**

PIEZOMETER TYPE _____ WELL TYPE **GM**

HGT. RISER ABOVE GROUND **616.22** DIA **1"**

DEPTH TO TOP OF WELL SCREEN **498.81** BOTTOM **496.81**

WELL DEVELOPMENT _____ BACKFILL **VOLCLAY**

FIELD PARTY **TJH-TLS** RIG **CME-75**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	USCS	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
1	SS	3.7	5.2	4-6-7	.8					**BROWN,TAN,GRAY SANDY SILT**		
2	SS	8.7	10.2	4-7-9-	.9		5					
3	SS	13.7	15.2	3-7-12	.8		10			**RED SILTY CLAY**		
4	SS	18.7	20.2	4-10-22	1.3		15			**RED,TAN,YELLOW CLAYSTONE** weathered.		

TYPE OF CASING USED

X	NQ-2 ROCK CORE	
X	6" x 3.25 HSA	
	9" x 6.25 HSA	
	HW CASING ADVANCER	4"
	NW CASING	3"
	SW CASING	6"
	AIR HAMMER	8"

Continued Next Page

PIEZOMETER TYPE: PT = OPEN TUBE POROUS TIP, SS = OPEN TUBE SLOTTED SCREEN, G = GEONOR, P = PNEUMATIC

WELL TYPE: OW = OPEN TUBE SLOTTED SCREEN, GM = GEOMON

RECORDER _____

AEP R1R2.GPJ AEP.GDT 11/24/10

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER _____

COMPANY _____ BORING NO. **R-93096** DATE **11/24/10** SHEET **2** OF **5**

PROJECT **GAVIN FGD CONVERSION PROJECT** BORING START **2/2/93** BORING FINISH **2/8/93**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
5	SS	23.7	24.5	18-50/.3	.8					**RED CLAY SHALE**		
6	NQ	24.5	25.0		0	0	25					
7	NQ	25.0	35.0		10.0	74				**RED CLAYSTONE**		
										GRAY SANDY CLAYSTONE		
							30					
8	NQ	35.0	45.0		10.0	86	35			**RED CLAYSTONE**		
										GRAY SHALEY CLAYSTONE		
							40			**RED SHALEY CLAYSTONE**		
9	NQ	45.0	55.0		10.0	94	45			**RED,TAN,YELLOW CLAYSTONE** With limestone nodules.		

Continued Next Page

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER _____

COMPANY _____ BORING NO. **R-93096** DATE **11/24/10** SHEET **3** OF **5**

PROJECT **GAVIN FGD CONVERSION PROJECT** BORING START **2/2/93** BORING FINISH **2/8/93**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
							50					
10	NQ	55.0	65.0		7.1	37	55					
							60					
11	NQ	65.0	75.0		10.0	87	65					
							70					

Continued Next Page

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER _____

COMPANY _____ BORING NO. **R-93096** DATE **11/24/10** SHEET **4** OF **5**

PROJECT **GAVIN FGD CONVERSION PROJECT** BORING START **2/2/93** BORING FINISH **2/8/93**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
12	NQ	75.0	85.0		10.0	63	75			**RED CLAY SHALE**		
13	NQ	85.0	95.0		10.0	71	80					
14	NQ	95.0	100.0		4.8	90	85			**RED,TAN,YELLOW CLAYSTONE**		
							90			**GRAY SHALEY LIMESTONE**		89.9 Top of bentonite seal.
										GRAY LIMESTONE		
										RED SHALEY LIMESTONE		
										GRAY SHALEY LIMESTONE Badly broken.		
										GRAY SILTY SHALE		
							95			**GRAY SANDY SHALE**		95.0 Top of gravel pack.

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AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER _____

COMPANY _____ BORING NO. **R-93096** DATE **11/24/10** SHEET **5** OF **5**

PROJECT **GAVIN FGD CONVERSION PROJECT** BORING START **2/2/93** BORING FINISH **2/8/93**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
										RED AND GRAY SANDY SHALE		
15	NQ	100.0	105.0		5.0	98	100			**GRAY SILTY SHALE** Well cemented		
16	NQ	105.0	115.0		9.9	99	105					
							110					
17	NQ	115.0	121.4		6.4	89	115					114.2 Check value. 114.8 Top of screen. 116.8 Bottom of screen. 117.2 Tip of geomon. 118.0 Bottom of gravel pack.
							120			**RED,TAN,YELLOW CLAYSTONE**		124.4 Bottom of boring.

AEP R1R2.GPJ AEP.GDT 11/24/10

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER

COMPANY

PROJECT **GAVIN FGD CONVERSION PROJECT**

COORDINATES **N 345,817.3 E 2,104,954.5**

GROUND ELEVATION **706.7** SYSTEM **STATE PLANE**

Water Level, ft	▽ 0.0	▼ 130.2	▼
TIME	07:30	07:15	
DATE	10-16-96	10-17-96	

BORING NO. **R-9631** DATE **11/29/10** SHEET **1** OF **10**

BORING START **10/14/96** BORING FINISH **10/17/96**

PIEZOMETER TYPE WELL TYPE **OW**

HGT. RISER ABOVE GROUND DIA **2.0**

DEPTH TO TOP OF WELL SCREEN **187.1** BOTTOM **225.9**

WELL DEVELOPMENT **YES** BACKFILL **QUICK GROUT**

FIELD PARTY **TJH-RLY-JCM** RIG **CME-75**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	USCS	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
1	SS	0.0	1.5	4-6-9	1.0				SC	**DARK BROWN SANDY CLAY** Moist, with trace of coal and gravel size sandstone fragments (fill).		
2	SS	1.5	3.0	7-6-6	1.5				CL	**GRAY CLAY** Moist, with clayshale gravel size shale fragments (fill).		
3	SS	3.0	4.5	4-4-7	1.5							
4	SS	4.5	6.0	7-4-6	1.4		5					
5	SS	6.0	7.4	3-3-50/.4	1.4					**GRAY CLAYSHALE** Dry.		Bailed hole dry water recovered 148.8 to 130.6 30 minutes. Bailed hole dry water recovered 149.6 to 132.6 17 minutes. 6:00 static water level ofter installation hole dry. 10-30-96 7:45 swl 233.0' 10' solid pipe sealed in bottom of hole with bentonite below monitoring zone as a reservoir.
6	SS	7.5	7.9	50/.4	.4							
7	NQ	9.0	10.5		1.2	75						
8	NQ	10.5	15.5		5.0	63	10			**DARK GRAY CLAYSHALE** Hard.		
9	NQ	15.5	20.5		2.7	50	15			**BLACK COAL** **DARK GRAY CLAYSHALE**		

TYPE OF CASING USED

X	NQ-2 ROCK CORE	
	6" x 3.25 HSA	
	9" x 6.25 HSA	
	HW CASING ADVANCER	4"
	NW CASING	3"
	SW CASING	6"
	AIR HAMMER	8"

Continued Next Page

PIEZOMETER TYPE: PT = OPEN TUBE POROUS TIP, SS = OPEN TUBE SLOTTED SCREEN, G = GEONOR, P = PNEUMATIC

WELL TYPE: OW = OPEN TUBE SLOTTED SCREEN, GM = GEOMON

RECORDER **JCM**

AEP R1R2.GPJ AEP.GDT 11/29/10

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER _____

COMPANY _____ BORING NO. **R-9631** DATE **11/29/10** SHEET **2** OF **10**

PROJECT **GAVIN FGD CONVERSION PROJECT** BORING START **10/14/96** BORING FINISH **10/17/96**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
10	NQ	20.5	25.5		5.0	94						
11	NQ	25.5	35.5		9.9	85	25			**BLACK CARBONACEOUS SHALE** **GRAY LIMESTONE** Hard. **GRAY CLAYSHALE** Hard. **GRAY SANDY SHALE** Hard, limestone nodules		
							30					
							35					
12	NQ	35.5	45.5		9.4	86				**MOTTLED RED, GRAY, GREEN CLAYSHALE** Hard.		
							40			**GRAY SANDY CLAYSHALE** Hard, limestone nodules, pyrite.		
							45					
13	NQ	45.5	55.5		10.0	100						

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AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER

COMPANY

BORING NO. **R-9631** DATE **11/29/10** SHEET **3** OF **10**

PROJECT **GAVIN FGD CONVERSION PROJECT** BORING START **10/14/96** BORING FINISH **10/17/96**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
										LIGHT GRAY SANDSTONE Fine grain, well cemented.		
										BLUE GRAY SANDY SHALE Limestone nodules, pyrite, some shaley sandstone.		
							50					
										Changing to light gray		
										BLUE GRAY SANDSTONE V-fine grain, well cemented.		
14	NQ	55.5	65.5		9.8	98	55					
										MOTTLED RED, PURPLE, GREEN, BLUE GREEN CLAYSHALE Hard, sandy in area, hard.		
							60					
										RED CLAYSHALE Hard, limestone.		
15	NQ	65.5	75.5		10.0	100	65					
										LIGHT BLUE GRAY SHALEY SANDSTONE Hard.		
							70			**BLUE GRAY SANDSTONE** Fine grain, well cemented, hard.		

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AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER _____

COMPANY _____ BORING NO. **R-9631** DATE **11/29/10** SHEET **4** OF **10**

PROJECT **GAVIN FGD CONVERSION PROJECT** BORING START **10/14/96** BORING FINISH **10/17/96**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
							75			**GRAY CLAYSHALE** Hard. **RED CLAYSHALE** Hard.		
16	NQ	75.5	85.5		10.0	95	80			**MOTTLED BLACK, YELLOW, PURPLE, BROWN CLAYSHALE** Medium hard.		
										LIGHT GRAY SANDY CLAYSHALE Hard, more sand at bottom, soft layer 84.2, limestone nodules.		
17	NQ	85.5	95.5		10.0	100	85					
							90			**RED, YELLOW BROWN CLAYSHALE** Hard.		
										MOTTLED PURPLE RED, YELLOW, BROWN CLAYSTONE Soft		
18	NQ	95.5	105.5		10.0	83	95					

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AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER _____

COMPANY _____ BORING NO. **R-9631** DATE **11/29/10** SHEET **5** OF **10**

PROJECT **GAVIN FGD CONVERSION PROJECT** BORING START **10/14/96** BORING FINISH **10/17/96**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
							100					
							105					
19	NQ	105.5	111.8		5.5	0						
							110			**RED, BLUE GRAY CLAYSHALE** Hard, limestone nodules.		
							115					
21	NQ	115.5	125.5		10.0	100						
20	NQ	118.8	122.5		3.7	100	120					

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AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER _____

COMPANY _____ BORING NO. **R-9631** DATE **11/29/10** SHEET **6** OF **10**

PROJECT **GAVIN FGD CONVERSION PROJECT** BORING START **10/14/96** BORING FINISH **10/17/96**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
							125					
22	NQ	125.5	135.5		10.0	100						
							130					
23	NQ	135.5	145.5		10.0	100	135			**BLUE GRAY SANDSTONE** Fine grain, hard, well cemented, shale partings grading to sandstone at 136.5 **Vertical crack 136.8 to 138.3.**		
							140			**BLUE GRAY SANDY CLAYSHALE** Hard, pyrite. **RED CLAYSHALE** Hard, limestone nodules.		
							145			**BLUE GRAY SANDY SHALE** Limestone nodules, pyrite, hard.		
24	NQ	145.5	155.5		10.0	100				**RED CLAYSHALE** Hard, limestone nodules. **BLUE GRAY CLAYSHALE** Hard, limestone nodules. **RED CLAYSHALE** Hard, limestone nodules.		

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AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER _____

COMPANY _____ BORING NO. **R-9631** DATE **11/29/10** SHEET **7** OF **10**

PROJECT **GAVIN FGD CONVERSION PROJECT** BORING START **10/14/96** BORING FINISH **10/17/96**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
										RED BLUE GREEN SANDY CLAYSTONE Medium hard, limestone nodules, changing to more red with depth.		
25	NQ	155.5	165.5		10.0	100	155					
							160					
26	NQ	165.5	175.5		10.0	100	165					
							170					
27	NQ	175.5	185.5		10.0	95	175					

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AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER _____

COMPANY _____ BORING NO. **R-9631** DATE **11/29/10** SHEET **8** OF **10**

PROJECT **GAVIN FGD CONVERSION PROJECT** BORING START **10/14/96** BORING FINISH **10/17/96**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
							180					178.4 top of seal.
							185					185.1 top of sand.
												187.1 top of screen.
							190			**.4 LAYER GRAY SHALEY LIMESTONE**		
29		195.5	205.5		10.0	100	195					
28	NQ	198.5	208.5		10.0	100				**BLUE GRAY SHALEY SANDSTONE** Hard, limestone nodules.		
							200			**RED CLAYSHALE** Hard, limestone nodules.		
										BLUE GRAY CLAYSHALE Hard, limestone		

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AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER _____

COMPANY _____ BORING NO. **R-9631** DATE **11/29/10** SHEET **9** OF **10**

PROJECT **GAVIN FGD CONVERSION PROJECT** BORING START **10/14/96** BORING FINISH **10/17/96**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
										nodules, changing to red 203.1 to 206.2.		
30	NQ	205.5	215.5		10.0	100	205			**BLUE GRAY SANDSTONE** Shale parting, v-fine grain, well cemented.		
										BLUE GRAY SANDY SHALE Sandstone partings, limestone.		
31	NQ	215.5	225.5		10.0	100	210					
							215					
							220					
32	NQ	225.5	235.3		9.8	100	225					225.9 bottom of screen. 227.0 bottom of sand.

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AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER _____

COMPANY _____ BORING NO. **R-9631** DATE **11/29/10** SHEET **10** OF **10**

PROJECT **GAVIN FGD CONVERSION PROJECT** BORING START **10/14/96** BORING FINISH **10/17/96**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
										RED AND GRAY CLAYSHALE Hard.		
							230			**MOTTLED RED, GRAY, PURPLE SANDY CLAYSTONE** Medium hard, limestone nodules.		
							235			**Longitude 38 56 56.36749 N** **Latitude 82 07 51.01131 W**		

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER

COMPANY **OHIO POWER COMPANY**

PROJECT **GAVIN PLANT FLY ASH POND CLOSURE**

COORDINATES **N 355,372.6 E 2,065,722.5**

GROUND ELEVATION **777.3** SYSTEM **STATE PLANE**

WATER LEVEL	▽ 23.7	▼	▽
TIME			
DATE	6-26-96		

BORING NO. **96152** DATE SHEET **1** OF **5**

BORING START **06/25/96** BORING FINISH **06/27/96**

PIEZOMETER TYPE WELL TYPE **OW**

HGT. RISER ABOVE GROUND **2.16** DIA

DEPTH TO TOP OF WELL SCREEN **127.0** BOTTOM **166.0**

WELL DEVELOPMENT **YES** BACKFILL **QUICK GROUT**

FIELD PARTY **MCR-REB-JCM** RIG **BK-81**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPH LOG	USCS	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
							0					
									SP	**BROWN SANDSTONE** Dry fine grain.		
							5					Latitude 38 58 30.76511 N. = Longitude 082 09 28.87729 W.
										BROWN AND GRAY SAND Fine grain, dry.		
							10					
									SC	**BROWN SANDY CLAY** Moist, fine grain with 3/4" gravel.		
							15					
									SP	**BROWN SAND** Moist, fine grain.		
							20					
							25					
							30					
										BROWN AND GRAY CLAYSHALE Dry.		
							35					
										N6 MEDIUM LIGHT GRAY LIMESTONE Vertical crack from 37.8-38.8.		
							40			**N6 MEDIUM GRAY CLAY SHALE**		
							45					

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TYPE OF CASING USED

X	NQ-2 ROCK CORE	
	6" x 3.25 HSA	
X	9" x 6.25 HSA	
	HW CASING ADVANCER	4"
	NW CASING	3"
	SW CASING	6"

PIEZOMETER TYPE: PT = OPEN TUBE POROUS TIP, SS = OPEN TUBE SLOTTED SCREEN, G = GEONOR, P = PNEUMATIC

WELL TYPE: OW = OPEN TUBE SLOTTED SCREEN, GM = GEOMON

RECORDER **REB**

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER

COMPANY **OHIO POWER COMPANY**

PROJECT **GAVIN PLANT FLY ASH POND CLOSURE**

BORING NO. **96152** DATE SHEET **2** OF **5**

BORING START **06/25/96** BORING FINISH **06/27/96**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPH LOG	USCS	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
							55			10YR 4/6 MODERATE REDDISH BROWN CLAY SHALE		
										5YR 4\2 GRAYISH RED SANDY SHALE		
										5R 5/4 MODERATE RED CLAYSHALE		
										N5 MEDIUM GRAY CLAYSHALE		
										N7 LIGHT GRAY SANDY SHALE		
							60			MOTTLED GRAY, RED, GREEN CLAYSHALE		
							65			N7 LIGHT GRAY SANDY SHALE		
										LIGHT GRAY CLAYSHALE		
							70			5R 4/2 GRAY REDDISH CLAYSTONE		
										RETURN WATER		
										pH 7.22		
										COND 925		
							75			DRILL WATER		
										pH 6.86		
										COND 869		
										N5 MEDIUM GRAY SANDY SHALE		
							80			RED AND GRAY CLAYSTONE With calcite.		
										RED AND GRAY CLAYSHALE		
										5R 4/6 MODERATE RED CLAYSTONE		
							85			5R 4/6 MODERATE RED CLAYSHALE		
										MOTTLED RED, GREEN, GRAY CLAYSTONE		
							90			MOTTLED GRAY, GREEN, RED CLAYSHALE		
										5GY 6/1 REDDISH GRAY CLAYSTONE		
							95			10R 4\2 GRAYISH GREENISH RED CLAYSHALE		
							100			10R3\4 DARK REDDISH BROWN CLAYSTONE		Lost all return water 97.0
							105			MOTTLED RED, GRAY, BROWN CLAYSHALE		
										MOTTLED RED, BROWN, GRAY CLAYSTONE		
							110			10R 4\6 MODERATE REDDISH BROWN		

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AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER

COMPANY **OHIO POWER COMPANY**

PROJECT **GAVIN PLANT FLY ASH POND CLOSURE**

BORING NO. **96152** DATE SHEET **3** OF **5**

BORING START **06/25/96** BORING FINISH **06/27/96**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPH LOG	USCS	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
							120			CLAYSHALE 5R 4\6 MODERATE RED CLAYSTONE 5R 4\6 MODERATE RED CLAYSHALE		118.0 Top of seal.
							125			N6 MEDIUM LIGHT GRAY SANDY SHALE		124.1 Top of sand.
							130					
							135			N6 MEDIUM LIGHT GRAY SANDSTONE With shale streaks.		
							140					
							145			N6 MEDIUM LIGHT GRAY CLAYSHALE With pyrite. 10R 3\4 DARK REDDISH BROWN CLAYSHALE		
							150			N5 MEDIUM GRAY SANDY SHALE N7 LIGHT GRAY SANDSTONE Well cemented.		Regained all drill water.
							155			N7 LIGHT GRAY SANDY SHALE N7 MEDIUM DARK GRAY CLAYSHALE With calcite and limestone nodules.		Used 3500 gallons of drill water.
							160					
							165			N5 MEDIUM GRAY SANDY SHALE N7 LIGHT GRAY SANDSTONE		166.0 Bottom of screen.
							170			N4 MEDIUM DARK GRAY CLAYSHALE 5R 4\6 MODERATE RED AND GRAY CLAYSHALE N5 MEDIUM GRAY CLAYSTONE With limestone nodules.		169.1 Bottom of sand.
							175			5R 4\6 MODERATE RED CLAYSTONE With limestone nodules. N6 MEDIUM LIGHT GRAY CLAYSTONE GRAY LIMESTONE 10R 4\6 MODERATE REDDISH BROWN		

Continued Next Page

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER _____

COMPANY **OHIO POWER COMPANY** BORING NO. **96152** DATE _____ SHEET **4** OF **5**

PROJECT **GAVIN PLANT FLY ASH POND CLOSURE** BORING START **06/25/96** BORING FINISH **06/27/96**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPH LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
										CLAYSTONE N5 MEDIUM GRAY CLAYSHALE RED AND GRAY CLAYSHALE		
							185			MOTTLED RED, GRAY, BROWN CLAYSTONE With limestone nodules.		
							190					
							195					
							200					
							205			MOTTLED RED GRAY, BROWN CLAYSTONE With limestone nodules.		
							210					
							215			N6 MEDIUM LIGHT GRAY SANDY SHALE N6 MEDIUM LIGHT GRAY CLAYSHALE With calcite and limestone nodules.		Used 5000 gallons of drill water.
							220					
							225			N7 LIGHT GRAY SANDSTONE		
							230			N7 LIGHT GRAY SANDY SHALE		
							235					
							240					

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AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER _____

COMPANY **OHIO POWER COMPANY** BORING NO. **96152** DATE _____ SHEET **5** OF **5**

PROJECT **GAVIN PLANT FLY ASH POND CLOSURE** BORING START **06/25/96** BORING FINISH **06/27/96**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPH LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
										N6 MEDIUM LIGHT GRAY CLAYSHALE		
							250					
										N1 BLACK CLAYSHALE		
							255					

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

MONITORING WELL CONSTRUCTION

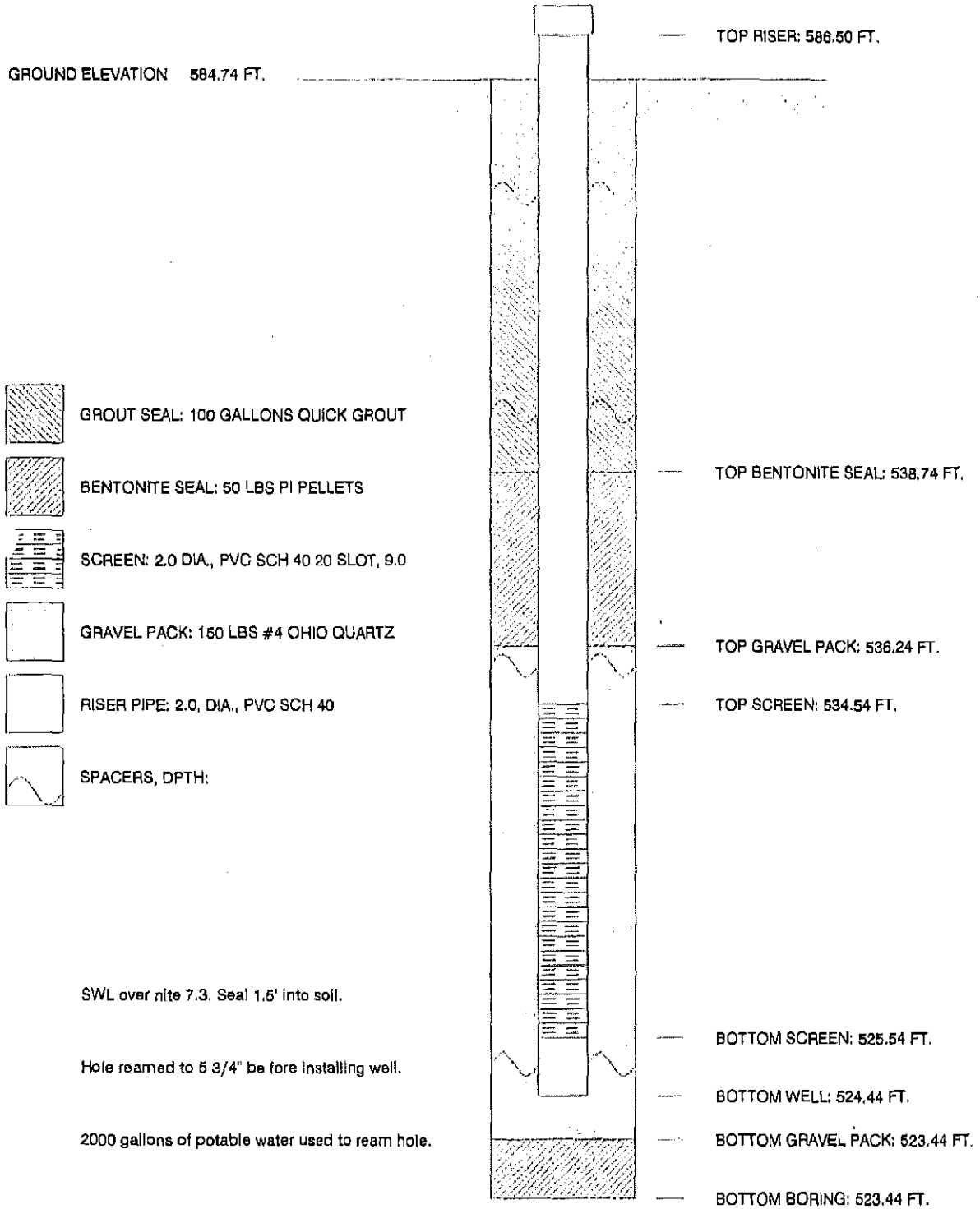
JOB NUMBER

COMPANY **OHIO POWER COMPANY** WELL No. **96158** BORING No. **96158** INSTALLED **11/29/95**

PROJECT **GAVIN PLANT FLY ASH POND CLOSURE**

COORDINATES **N 351,115.0 E 2,070,634.8**

SYSTEM **STATE PLANE**



SWL over nite 7.3. Seal 1.5' into soil.

Hole reamed to 5 3/4" be fore installing well.

2000 gallons of potable water used to ream hole.

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

MONITORING WELL CONSTRUCTION

JOB NUMBER _____

COMPANY OHIO POWER COMPANY

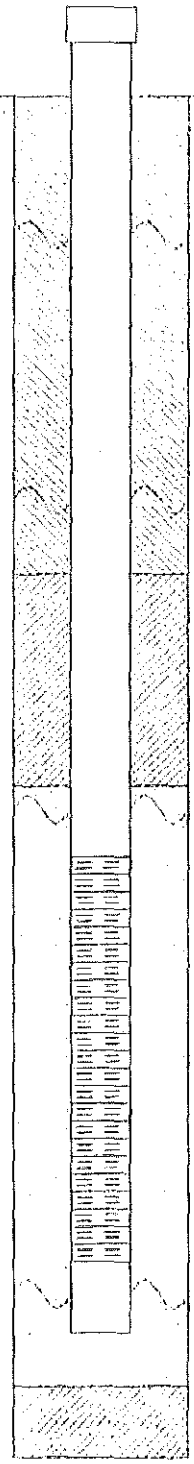
WELL No. 96157 BORING No. 96157 INSTALLED 11/21/95

PROJECT GAVIN PLANT FLY ASH POND CLOSURE

COORDINATES N 351,118.0 E 2,070,648.6

SYSTEM STATE PLANE

GROUND ELEVATION 584.59 FT.



TOP RISER: 586.52 FT.

TOP BENTONITE SEAL: 557.89 FT.

TOP GRAVEL PACK: 553.39 FT.

TOP SCREEN: 546.89 FT.

BOTTOM SCREEN: 537.89 FT.

BOTTOM WELL: 536.79 FT.

BOTTOM GRAVEL PACK: 536.79 FT.

BOTTOM BORING: 536.49 FT.

GROUT SEAL: 50 GALLONS QUICK GROUT

BENTONITE SEAL: 125 LBS PI PELLETS

SCREEN: 2.0 DIA., PVC SCH 40 20 SLOT, 9.0

GRAVEL PACK: 475 LBS #4 OHIO QUARTZ

RISER PIPE: 2.0, DIA., PVC SCH 40

SPACERS, DPTH:

Approximately 150 gallons of potable water to drill hole.

SWL 7.2 after 5 days.

SWL over nite 38.6, Hole drilled using 6.25 HSA.

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER

COMPANY **OHIO POWER COMPANY**

PROJECT **GAVIN PLANT FLY ASH POND CLOSURE**

COORDINATES **N 352,338.7 E 2,061,912.6**

GROUND ELEVATION **851.8** SYSTEM **STATE PLANE**

WATER LEVEL	▽ 72.2	▼ 66.9	▽ 77.3
TIME			
DATE	1-9-96	1-10-96	1-11-96

BORING NO. **96156** DATE SHEET **1** OF **6**

BORING START **01/03/96** BORING FINISH **01/11/96**

PIEZOMETER TYPE WELL TYPE **GM**

HGT. RISER ABOVE GROUND DIA **1.0**

DEPTH TO TOP OF WELL SCREEN **220.1** BOTTOM **222.1**

WELL DEVELOPMENT **YSEE NOTES** BACKFILL **QUICK GROUT**

FIELD PARTY **MCR-RLY-PDK** RIG **BK-81**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPH LOG	USCS	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
1	SS	1.7	3.2	1-1-2	.1				CL	DECON AT GAVIN FAD 1-2-96 USING LEADING CREEK RUAL WATER BROWN CLAY		
2	SS	6.7	7.4	38-50/.2	.6		5			BROWN CLAY SHALE Dry.		Latitude 38 58 00.91662 N. = Longitude 082 10 17.26120 W.
3	SS	11.7	11.7	50/0	0		10					
4	SS	13.6	13.6	50/0	0	0				N6 MEDIUM LIGHT GRAY CLAYSHALE		
5	NQ	13.7	15.0		1.3	51	15			10YR 6\6 DARK YELLOWISH ORANGE SANDY CLAYSTONE		
6	NQ	15.0	24.0		9.0					10YR 6\6 DARK YELLOWISH ORANGE SANDSTONE		
7	NQ	24.0	30.0		1.6	0	20					
8	NQ	30.0	35.0		5.0	46	25					
9	NQ	35.0	45.0		10.0	83	30					
10	NQ	45.0	55.0		10.0	86	35					
							40					
							45					

TYPE OF CASING USED

X	NQ-2 ROCK CORE	
X	6" x 3.25 HSA	
	9" x 6.25 HSA	
	HW CASING ADVANCER	4"
	NW CASING	3"
	SW CASING	6"

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PIEZOMETER TYPE: PT = OPEN TUBE POROUS TIP, SS = OPEN TUBE SLOTTED SCREEN, G = GEONOR, P = PNEUMATIC

WELL TYPE: OW = OPEN TUBE SLOTTED SCREEN, GM = GEOMON

RECORDER **MCR**

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER

COMPANY **OHIO POWER COMPANY** BORING NO. **96156** DATE SHEET **2** OF **6**

PROJECT **GAVIN PLANT FLY ASH POND CLOSURE** BORING START **01/03/96** BORING FINISH **01/11/96**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPH LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
11	NQ	55.0	65.0		10.0	70	55			10YR 5\4 MODERATE YELLOWISH BROWN SANDSTONE		
										58.3 GRAY CLAY SEAM		
							60			5B 5\1 MEDIUM BLUISH GRAY SANDSTONE		
12	NQ	65.0	70.0		5.0	60	65			N5 MEDIUM GRAY SANDSTONE		
										N3 DARK GRAY CLAYSTONE		
13	NQ	70.0	75.0		5.0	60	70			N3 DARK GRAY CLAYSHALE		
14	NQ	75.0	79.0		4.0	50	75			N3 DARK GRAY CLAYSTONE Well cemented.		
										BLACK COAL		
15	NQ	79.0	79.2		.2	46				N4 MEDIUM DARK GRAY CLAYSHALE Soft.		
16	NQ	79.2	84.8		4.9		80			BLACK COAL		
										N4 MEDIUM DARK GRAY CLAYSHALE		
17	NQ	84.8	94.8		10.0	60	85					
							90					
18	NQ	94.8	97.3		2.5	0	95			N4 MEDIUM DARK GRAY CLAYSHALE With limestone.		
										DARK GRAY SANDY LIMESTONE Hard.		
19	NQ	97.3	104.8		7.0					Drill water pH 7.45, return water 7.20 Summer test		
										GRAY CLAYSHALE		
							100					
20	NQ	104.8	113.8		9.0	62	105			10R 4\6 MODERATE REDDISH BROWN CLAYSHALE Soft.		
							110					
21	NQ	113.8	119.8		6.0	83				5b 5\1 MEDIUM BLUISH GRAY CLAYSTONE		

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AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER

COMPANY **OHIO POWER COMPANY** BORING NO. **96156** DATE SHEET **3** OF **6**

PROJECT **GAVIN PLANT FLY ASH POND CLOSURE** BORING START **01/03/96** BORING FINISH **01/11/96**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPH LOG	USCS	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
										Well cemented.		
22	NQ	119.8	124.8		5.0	80	120			5rp 4\2 GRAYISH RED PURPLE CLAYSTONE With high angle fracture at 121.9. 5B 5\1 MEDIUM BLUISH SANDY CLAYSTONE Well cemented.		
23	NQ	124.8	134.8		10.0	90	125					Used approximately 3000 gallons of water to this point.
							130					
24	NQ	134.8	144.8		10.0	83	135			10R 4\6 MODERATE REDDISH BROWN CLAYSHALE		
										N5 MEDIUM GRAY SANDY CLAYSTONE CLARKSBURG LS HORIZON		
							140			10R 4\6 MODERATE REDDISH BROWN CLAYSHALE		
25	NQ	144.8	154.8		10.0	63	145			5YR 4\1 BROWNISH GRAY CLAYSHALE		
							150					
26	NQ	154.8	164.8		10.0	46	155			10YT 4\2 DARK YELLOWISH BROWN CLAYSHALE Soft.		
							160					
27	NQ	164.8	174.8		10.0	46	165			10R 3\4 DARK REDDISH BROWN CLAYSHALE Soft.		
							170					171.0 Top of bentonite seal.
28	NQ	174.8	178.8			58	175			10R 4\6 MODERATE REDDISH BROWN CLAYSHALE Soft.		175.5 Top of sand.
29	NQ	178.8	184.8			60				10R 4\6 MODERATE REDDISH BROWN		Used approximately

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AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER

COMPANY **OHIO POWER COMPANY** BORING NO. **96156** DATE SHEET **4** OF **6**

PROJECT **GAVIN PLANT FLY ASH POND CLOSURE** BORING START **01/03/96** BORING FINISH **01/11/96**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPH LOG	USCS	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
										CLAYSTONE Hard.		5000 gallons of water to this point.
										GRAY SANDY CLAYSTONE Hard.		
30	NQ	184.8	192.8		8.0	98	185			**5B 5\1 MEDIUM BLUISH GRAY SANDY SILTSTONE** Fine grain, well cemented.		
31	NQ	192.8	198.8		6.0	100	190			**SILTY SANDSTONE** Medium to fine grain, well cemented, cross bedding throughout.		
32	NQ	198.8	208.8		9.9	99	195			**N7 SANDY SILTSTONE** Fine grain, well cemented.		
							200					
33	NQ	208.8	218.8		10.0	92	205			**N7 LIGHT GRAY SANDSTONE** Medium to fine grain, well cemented, cross bedding throughout.		
							210					
34	NQ	218.8	228.8		10.0	83	215			**GRAY LIMESTONE** Hard. ELK LICK		
										N6 MEDIUM LIGHT GRAY CLAYSTONE Well cemented.		
							220			**MEDIUM DARK GRAY CLAYSHALE** Well cemented, hard.		219.6 Check valve. 220.1 Top of screen. 222.1 Bottom of screen. 224.0 Top of bottom seal.
35	NQ	228.8	238.8		9.4	81	225			**10R 4\2 GRAYISH RED CLAYSHALE**		
							230			**10R 4\2 GRAYISH RED CLAYSHALE**		Used approximately 6500 gallons of water to this point.
36	NQ	238.8	243.8		5.0	80	235					
							240			**10 R 2\2 VERY DUSKY RED CLAYSHALE** Hard.		
37	NQ	243.8	251.8		7.8	50				**N6 MEDIUM LIGHT GRAY CLAYSHALE** limestone nodules throughout.		

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AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER

COMPANY **OHIO POWER COMPANY** BORING NO. **96156** DATE SHEET **5** OF **6**

PROJECT **GAVIN PLANT FLY ASH POND CLOSURE** BORING START **01/03/96** BORING FINISH **01/11/96**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPH LOG	USCS	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
							250			N6 MEDIUM LIGHT GRAY SHALEY LIMESTONE N6 MEDIUM LIGHT GRAY CLAYSHALE 10R 2\2 VERY DUSKY RED CLAYSHALE		
38	NQ	251.8	258.8		7.0	97	255			5G 6\1 GREENISH GRAY CLAYSTONE Hard with limestone nodules throughout.		
39	NQ	258.8	268.8		10.0	93	260			N6 MEDIUM LIGHT GRAY SILTSTONE Fine grain, well cemented, hard.		
40	NQ	268.8	275.8		7.0	57	265			5YR 4\1 BROWNISH GRAY CLAYSHALE 10R 2\2 VERY DUSKY RED CLAYSHALE Hard, soft weathered area at 270.4- 274.5.		
41	NQ	275.8	283.8		7.6	38	270			N6 MEDIUM LIGHT GRAY SILTY CLAY SHALE Hard.		
42	NQ	283.6	293.6		10.0	76	275			N6 MEDIUM LIGHT GRAY LIMESTONE Fracture bottom .3. N5 MEDIUM GRAY SILTY CLAYSHALE Medium hard, high angle fractures throughout.		Used approximately 8500 gallons of water to this point.
43	NQ	293.8	303.8		10.0	93	280			N5 MEDIUM GRAY SHALEY SANDSTONE Hard, fine to medium grain, cross bedding throughout.		
44	NQ	303.8	313.8		9.7	88	285					
							290					
							295					
							300					
							305					

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AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER _____

COMPANY **OHIO POWER COMPANY** BORING NO. **96156** DATE _____ SHEET **6** OF **6**

PROJECT **GAVIN PLANT FLY ASH POND CLOSURE** BORING START **01/03/96** BORING FINISH **01/11/96**

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPH LOG	USCS	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
45	NQ	313.8	323.8		9.9	77	315			**N4 MEDIUM DARK GRAY SILTY CLAYSHALE** Fracture. **LIGHT GRAY SHALEY LIMESTONE** PORTERSVILLE LS **SILTY CLAY SHALE** **SANDY CLAYSTONE** Hard, fine grain, limestone nodules throughout, calcite deposits 319.0.		
46	NQ	323.8	333.8		10.0	96	320			**N5 MEDIUM GRAY SANDY CLAYSTONE** Hard, fine grain, calcite throughout.		
47	NQ	333.8	343.8		9.8	97	325			**N5 MEDIUM GRAY SILTY SANDSTONE** Hard, well cemented, fine grain, cross bedding throughout.		
48	NQ	343.8	353.8		10.0	99	330					
49	NQ	353.8	363.8		9.4	84	335			**N5 MEDIUM GRAY SANDSTONE** Hard, well cemented, medium grain, some cross bedding.		
							340					
							345					
							350					
							355					
							360			**N5 MEDIUM GRAY SANDY CLAYSTONE** Fine grain, soft area at 361.2-361.5		

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER _____

COMPANY _____

PROJECT **GAVIN FLY ASH POND CLOSURE**

COORDINATES _____

GROUND ELEVATION _____ SYSTEM _____

Water Level, ft	▽ 10.2	▼ 97.8	▽
TIME	7:00AM		
DATE	8/4/99	9/9/99	

BORING NO. **9910** DATE **3/7/12** SHEET **1** OF **7**

BORING START _____ BORING FINISH _____

PIEZOMETER TYPE _____ WELL TYPE _____

HGT. RISER ABOVE GROUND _____ DIA _____

DEPTH TO TOP OF WELL SCREEN _____ BOTTOM _____

WELL DEVELOPMENT _____ BACKFILL _____

FIELD PARTY _____ RIG _____

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
							5			**NO SPT SAMPLES TAKEN** Drilled 3.25" HSA to top of bedrock and started coring		Water for drilling and deconning came from G-5 belt station using Leading Creek Corp. water. Deconned all tools and drill before starting to drill on 8/2/99. Boring Geo-logged and grouted on 8/12/99
							10				▽	
							15					

TYPE OF CASING USED

	NQ-2 ROCK CORE	
	6" x 3.25 HSA	
	9" x 6.25 HSA	
	HW CASING ADVANCER	4"
	NW CASING	3"
	SW CASING	6"
	AIR HAMMER	8"

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PIEZOMETER TYPE: PT = OPEN TUBE POROUS TIP, SS = OPEN TUBE SLOTTED SCREEN, G = GEONOR, P = PNEUMATIC

WELL TYPE: OW = OPEN TUBE SLOTTED SCREEN, GM = GEOMON

RECORDER _____

AEP_GAVIN_FLY_ASH_POND.GPJ AEP.GDT 3/7/12

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER _____

COMPANY _____ BORING NO. **9910** DATE **3/7/12** SHEET **2** OF **7**

PROJECT **GAVIN FLY ASH POND CLOSURE** BORING START _____ BORING FINISH _____

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
1	NQ-2	23.9	29.8		5.6	45				**10R 3/4 DARK REDDISH BROWN CLAY SHALE**		
										N3 DARK GRAY CLAY SHALE		
2	NQ-2	29.8	39.8		8.6	88				**10R 3/4 DARK REDDISH BROWN CLAY SHALE** Slightly weathered		
										N4 MEDIUM DARK GRAY CLAY SHALE		
										10YR 5/4 MODERATE YELLOWISH BROWN & N5 MEDIUM GRAY CLAY SHALE		
										10R 3/4 DARK REDDISH BROWN CLAY SHALE		
3	NQ-2	39.8	49.8		7.1	99				**10R 3/4 DARK REDDISH BROWN CLAY SHALE** Slightly weathered		
										MULTI COLORED CLAY SHALE N5 MEDIUM GRAY, 10YR 6/6 DARK YELLOWISH ORANGE,& 5RP VERY DUSKY		

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AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER _____

COMPANY _____ BORING NO. **9910** DATE **3/7/12** SHEET **3** OF **7**

PROJECT **GAVIN FLY ASH POND CLOSURE** BORING START _____ BORING FINISH _____

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
										RED PURPLE		
4	NQ-2	49.8	56.8		4.7	83				**5YR 3/4 MODERATE BROWN CLAY SHALE** With 5Y 5/6 LIGHT OLIVE GREEN & N6 MEDIUM LIGHT GRAY MARBLING THROUGHOUT Slightly weathered, semisoft		
5	NQ-2	56.8	64.8		8.3	77				**10R 4/6 MODERATE REDDISH BROWN CLAY SHALE** With N6 MEDIUM LIGHT GRAY MARBLING THROUGHOUT 10R 4/2 GRAYISH RED LIMESTONE NODULES AT 62.0' & 63.3'		
6	NQ-2	64.8	74.8		9.9	94				**10R 3/4 DARK REDDISH BROWN CLAY SHALE**		
										N4 MEDIUM DARK GRAY FINE GRAIN SANDSTONE Well cemented, hard		
										N4 MEDIUM DARK GRAY & N6 MEDIUM LIGHT GRAY SILTSTONE With cross bedding, hard, well cemented		

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AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER _____

COMPANY _____ BORING NO. **9910** DATE **3/7/12** SHEET **4** OF **7**

PROJECT **GAVIN FLY ASH POND CLOSURE** BORING START _____ BORING FINISH _____

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
7	NQ-2	74.8	84.8		9.9	76						Used 1800 gallons of drill water to this point - 74.8'
										N5 MEDIUM GRAY SILTY CLAY SHALE Well cemented & bonded, hard		
										10R 3/4 DARK REDDISH BROWN CLAY SHALE Slightly weathered from 80.8' - 84.2'		
8	NQ-2	84.8	94.8		9.9	95				**5B 5/1 MEDIUM BLUISH GRAY SILT STONE**		
										10R 3/4 DARK REDDISH BROWN CLAY SHALE With N5 MEDIUM GRAY LIMESTONE NODULES THROUGHOUT		
										N6 MEDIUM LIGHT GRAY & N2 GRAYISH BLACK FINE GRAIN SILT STONE With cross bedding		
9	NQ-2	94.8	104.8		10	93				**N4 MEDIUM DARK GRAY & N5 MEDIUM GRAY CLAY SHALE**		
										10R 3/4 DARK REDDISH BROWN & N3 DARK GRAY CLAY SHALE		
										5B 5/1 MEDIUM BLUISH GRAY FINE GRAIN		

Continued Next Page

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER _____

COMPANY _____ BORING NO. **9910** DATE **3/7/12** SHEET **5** OF **7**

PROJECT **GAVIN FLY ASH POND CLOSURE** BORING START _____ BORING FINISH _____

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
										SANDY SILT STONE Well cemented, hard		
										N4 MEDIUM DARK GRAY CLAY SHALE With pyrite throughout		
										10R 3/4 DARK REDDISH BROWN CLAY SHALE		
10	NQ-2	104.8	114.8		9.8	60				**MULTI COLORED WEATHERED CLAY SHALE** 10R 3/4 DARK REDDISH BROWN, 5Y 6/4 DUSKY YELLOW, 5RP 2/2 VERY DUSKY RED PURPLE, 5Y 5/6 LIGHT OLIVE BROWN, & N3 DARK GRAY		
11	NQ-2	114.8	123.8		8.8	80				**MULTI COLORED WEATHERED CLAY SHALE** 10R 3/4 DARK REDDISH BROWN, 5Y 6/4 DUSKY YELLOW, 5RP 2/2 VERY DUSKY RED PURPLE, 5Y 5/6 LIGHT OLIVE BROWN, & N3 DARK GRAY With a lot of slick & slides		SWL at 10.2' on 8/4/99; NQ hole to 114.8'

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AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER _____

COMPANY _____ BORING NO. **9910** DATE **3/7/12** SHEET **6** OF **7**

PROJECT **GAVIN FLY ASH POND CLOSURE** BORING START _____ BORING FINISH _____

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
12	NQ-2	123.8	133.8		9.5	65						
13	NQ-2	133.8	143.8		9.5	55						
14	NQ-2	143.8	152.8		9.0					**5RP 2/2 VERY DUSKY RED PURPLE CLAY SHALE** With limestone nodules		
										10R 3/4 DARK REDDISH BROWN & 10Y 4/2 GRAYISH OLIVE CLAY SHALE With cross bedding, slightly weathered		Used 3800 gallons of drill water to this

Continued Next Page

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

LOG OF BORING

JOB NUMBER _____

COMPANY _____ BORING NO. **9910** DATE **3/7/12** SHEET **7** OF **7**

PROJECT **GAVIN FLY ASH POND CLOSURE** BORING START _____ BORING FINISH _____

SAMPLE NUMBER	SAMPLE	SAMPLE DEPTH IN FEET FROM	SAMPLE DEPTH IN FEET TO	STANDARD PENETRATION RESISTANCE BLOWS / 6"	TOTAL LENGTH RECOVERY	RQD %	DEPTH IN FEET	GRAPHIC LOG	U S C S	SOIL / ROCK IDENTIFICATION	WELL	DRILLER'S NOTES
												point - 148.8'
										5BG 5/2 GRAYISH BLUE GREEN CLAY SHALE Well cemented		Stopped boring at 152.8' on 8/4/99 Flushed boring with approx. 700 gallons of water.

WELL NUMBER RB12-01/MW-20

Geosyntec consultants

CLIENT AEP
PROJECT NAME Gavin FAR Closure Site Investigation
PROJECT NUMBER CHE8273
PROJECT LOCATION Cheshire, OH
DATE STARTED 5/8/12 **COMPLETED** 5/10/12
GROUND ELEVATION 771.8 ft **HOLE SIZE** 5.5 inches
DRILLING CONTRACTOR Frontz Drilling
GROUND WATER LEVELS:
DRILLING METHOD Air Rotary/Rockcore
AT TIME OF DRILLING ---
LOGGED BY Jim Bannantine **CHECKED BY** J. Neil Couch
AT END OF DRILLING ---
NORTHING, EASTING 355665.7 N, 2063769.2 E
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY/ ATTEMPTED (RQD%)	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
0					Casing Top Elev: 774.3 (ft) Casing Type: Schd. 80 PVC
				0.5 (771.3) CLAY (CL) -gray (7.5YR 5/1); some SILT and SAND; low to medium plastic; very stiff; moist	
	SC 1	38" / 60"		SAND (SW-SC) -reddish yellow (7.5YR 6/6 to 7.5YR 5/8); some CLAY; trace COAL; fine grained; mostly quartz; loose	
5				5.0 (766.8)	
	SC 2	45" / 60"		SAND (SW-SM) -light yellowish brown (2.5Y 6/3) to olive yellow (2.5Y 6/6); little silt; fine grained; mottled; stiff	
				8.3 (763.6) 8.5 (763.3) COAL -dark gray (N3) to grayish black (N2); thinnly bedded, soft	
10				SHALE/CLAYSTONE - medium gray (N5); thinly to very thinly bedded; soft to very soft; damp 10.0 (761.8)	
	SC 3	48" / 48"		SHALE/CLAYSTONE - medium gray (N5); thinly to very thinly bedded; soft to very soft; damp	
				14.0 (757.8)	
15				SHALE - thinly bedded; some calcareous nodules; iron staining on fractured surfaces; breaks easily along bedding planes; trace pyrite near top	
	RC 1	39" / 84"			
20					

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CLIENT AEP **PROJECT NAME** Gavin FAR Closure Site Investigation

PROJECT NUMBER CHE8273 **PROJECT LOCATION** Cheshire, OH

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY/ ATTEMPTED (RQD%)	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
20					
				1 ft - SHALE - as above from 14.0 to 21.0 ft 1 ft - SHALE - medium gray; hard; massive; conformable with overlying unit 3 FT - MUDSTONE - greenish black (5 G 2/1); some carbonaceous clasts; massive; some wet mud on fracture planes	
25	RC 2	60" / 120"			
30				31.0 740.8	
				0.1 ft to 0.2 ft - CLAYSTONE - medium gray (N5) to medium dark gray (N4); very dark red (5 R 2/6) carbonaceous nodules 0.1 ft - Soft gray mud 1.25 ft - SHALE / CLAYSTONE - medium dark gray (N4); some olive brown (5 Y 4/4) carbonaceous nodules; massive; soft; many bedding planes have slickenslided surfaces 1.58 ft - SANDSTONE - greenish gray (5GY 6/1) to dark gray (5 GY 4/1) to medium dark gray (N4); moderately hard	
35	RC 3	39" / 120"			
40				41.0 730.8	

(Continued Next Page)

CLIENT AEP **PROJECT NAME** Gavin FAR Closure Site Investigation

PROJECT NUMBER CHE8273 **PROJECT LOCATION** Cheshire, OH

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY/ ATTEMPTED (RQD%)	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
45	RC 4	80" / 120"		4.33 ft - SANDSTONE **TOP OF CONNELSVILLE SANDSTONE** - as above FROM 31.0 to 41.0 ft; some reddish carbonaceous nodules and thin silt layers; moderately hard 4-inch SHALE; thinly bedded 1.33 ft - CLAYSTONE/SILTSTONE - medium gray (N5); massive; soft 0.67 ft - CLAYSTONE - very dusky purple (5 RP 2/2); massive; moderately soft *(continued)*	
50				51.0 720.8	
55	RC 5	100" / 120"		CLAYSTONE/MUDSTONE - as above; medium bluish gray (5 B 5/1) to very dusky purple (5 RP 2/2); some cabonaceous nodules; breaks easily across some bedding planes; several slickensided surfaces	
60				61.0 710.8	
65				1.1 ft - SANDY SILTY SHALE - medium dark gray (N4), little pyrite 3.3 ft - CLAYSTONE/SILTSTONE **TOP OF CLARKSBURGH RED BEDS** - very dark red (5 R 2/6); thinly bedded in sections, thickly bedded in others; occassional very finely bedded gray shale; some slickensided surfaces 0.25 ft - **CLARKSBURGH LIMESTONE** - black (N7); massive; non-crystalline	

(Continued Next Page)

CLIENT AEP **PROJECT NAME** Gavin FAR Closure Site Investigation

PROJECT NUMBER CHE8273 **PROJECT LOCATION** Cheshire, OH

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY/ ATTEMPTED (RQD%)	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
70	RC 6	56" / 120"		1.1 ft - SANDY SILTY SHALE - medium dark gray (N4), little pyrite 3.3 ft - CLAYSTONE/SILTSTONE **TOP OF CLARKSBURGH RED BEDS** - very dark red (5 R 2/6); thinly bedded in sections, thickly bedded in others; occassional very finely bedded gray shale; some slickensided surfaces 0.25 ft - **CLARKSBURGH LIMESTONE** - black (N7); massive; non-crystalline *(continued)*	
71.0				700.8	
75	RC 7	67" / 120"		SILTSTONE/MUDSTONE - light olive brown (5 Y 5/6) to dusky red (5 R 3/4); some calcareous nodules; massive; some slickensided surfaces	
80					
81.0				690.8	
85	RC 8	0" / 120"		No Recovery	

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CLIENT AEP **PROJECT NAME** Gavin FAR Closure Site Investigation

PROJECT NUMBER CHE8273 **PROJECT LOCATION** Cheshire, OH

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY/ ATTEMPTED (RQD%)	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
90				No Recovery *(continued)*	
				91.0 680.8	
				No Recovery	
95	RC 9	0" / 120"			
100					Grout Seal
				101.0 670.8	
				SANDSTONE **MORGANTOWN SANDSTONE** - dusky yellowish green (10 GY 3/2) and dusky red (5 R 3/4) at about 108 ft depth; some SILTSTONE/MUDSTONE; some CLAYSTONE; little pyrite; massive	
105	RC 10	113" / 120"			Schd. 80 Solid Riser Pipe
110					
				111.0 660.8	

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CLIENT AEP **PROJECT NAME** Gavin FAR Closure Site Investigation

PROJECT NUMBER CHE8273 **PROJECT LOCATION** Cheshire, OH

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY/ ATTEMPTED (RQD%)	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
115	RC 11	102" / 120"		2.2 ft - SANDSTONE - grayish blue green (5 BG 5/2); some pyrite nodules; micaceous 6.3 ft - SILTSTONE to MUDSTONE - MUDSTONE is very thinly bedded to massive; breaks easily along some bedding planes; several slickensided surfaces *(continued)*	
120				121.0 650.8	
125	RC 12	115" / 120"		0.4 ft - MUDSTONE - as above from 111.0 to 121.0 ft; pyrite rich at base 1.6 ft - CLAYSTONE - dark reddish brown (10 R 3/4) to dusky red (5 R 3/4); some SILTSTONE; massive; some slickensided surfaces 6.8 ft - SANDY SHALE - grayish green (10 G 4/2); trace pyrite; micaceous; very thickly bedded; slickensided surfaces	
130				131.0 640.8	
				SANDY SHALE - as above from 121.0 to 131.0 ft	

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CLIENT AEP **PROJECT NAME** Gavin FAR Closure Site Investigation

PROJECT NUMBER CHE8273 **PROJECT LOCATION** Cheshire, OH

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY/ ATTEMPTED (RQD%)	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
135	RC 13	120" / 120"		134.8 637.1 135.3 SANDSTONE 636.6 - fine to medium grained quartz; micaceous; cross-bedded CLAYSTONE - dolomite nodules; calcareous; non-crystalline	
140				141.0 630.8 4.0 ft - CLAYSTONE - as above from 135.25 to 141.0 ft 2.0 ft - CLAYSTONE - calcareous; limestone nodules; trace pyrite; medium bluish gray (5 B 5/1) 2.0 ft - CLAYSTONE - grayish red purple (5 RP 4/2) to very dusky purple (5 RP 2/2); dark greenish yellow (10 Y 6/6) SILTSTONE lenses; conformable contact; slickensided surfaces	
145	RC 14	96" / 120"			
150				151.0 620.8 1.3 ft - CLAYSTONE - as above from 141.0 to 151.0 ft 0.4 ft - LIMESTONE - light gray (N7); fine grained; massive 0.7 ft - MUDSTONE - medium bluish gray (5 B 5/1) 0.9 ft - LIMESTONE - olive gray (5 Y 4/1); calcareous MUDSTONE 1.3 ft - SILTSTONE	
155	RC 15	56" / 120"			

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CLIENT AEP **PROJECT NAME** Gavin FAR Closure Site Investigation

PROJECT NUMBER CHE8273 **PROJECT LOCATION** Cheshire, OH

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY/ ATTEMPTED (RQD%)	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
160				1.3 ft - CLAYSTONE - as above from 141.0 to 151.0 ft 0.4 ft - LIMESTONE - light gray (N7); fine grained; massive 0.7 ft - MUDSTONE - medium bluish gray (5 B 5/1) 0.9 ft - LIMESTONE - olive gray (5 Y 4/1); calcareous MUDSTONE 1.3 ft - SILTSTONE *(continued)* 161.0 610.8	
165	RC 16	91" / 120"		4.5 ft - CLAYSTONE/SILTSTONE - very dark red (5 R 2/6) to dusky yellow (5 Y 6/4) 0.3 ft - CLAYSTONE - grayish green (10 GY 5/2) 2.75 ft - SILTSTONE - SANDY calcareous 171.0 600.8	
170					
175	RC 17	103" / 120"		4.75 ft - SANDSTONE to SANDY SHALE - dark greenish gray (5 G 4/1); carbonaceous 0.1 ft - LIMESTONE 0.9 ft - SANDSTONE/LIMESTONE - calcareous 2.9 FT - SANDSTONE - grayish green (10 GY 5/2); fine to medium grained quartz; hard; massive	
180					

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CLIENT AEP **PROJECT NAME** Gavin FAR Closure Site Investigation

PROJECT NUMBER CHE8273 **PROJECT LOCATION** Cheshire, OH

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY/ ATTEMPTED (RQD%)	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
180					
				181.0 590.8 0.7 ft - SANDSTONE - as above from 171.0 to 181.0 ft 0.7 ft - MUDSTONE - medium gray (N5) 0.7 ft - CLAYSTONE - grayish red purple (5 RP 4/2) to brownish gray (5 YR 4/1)	
185	RC 18	26" / 120"			
190				191.0 580.8 1.4 ft - SANDSTONE to SANDY SHALE - greenish black (5 GY 2/1) 0.9 ft - LIMESTONE - bluish white (5 B 9.1) to greenish gray (5 GY 6/1) 2.4 ft - MUDSTONE - medium bluish gray (5 B 5/1)	
195	RC 19	57" / 120"			
200				201.0 570.8	Bentonite Seal

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CLIENT AEP **PROJECT NAME** Gavin FAR Closure Site Investigation

PROJECT NUMBER CHE8273 **PROJECT LOCATION** Cheshire, OH

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY/ ATTEMPTED (RQD%)	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
205	RC 20	90" / 120"		0.3 ft - MUDSTONE - as above from 191.0 to 201.0 ft 3.0 ft - SANDSTONE **TOP OF COW RUN SANDSTONE** - grayish blue green (5 BG 5/2); some SHALE 4.2 ft - SHALE - grayish blue green (5 BG 5/2); some SAND *(continued)*	
210				211.0	
215	RC 21	111" / 120"		SHALE and SANDY SHALE - grayish blue green (5 BG 5/2); some SANDSTONE; thinly to moderately bedded; moderately hard to hard	Filter Pack 10-slot PVC Screen
220				221.0	
225				SHALE - medium dark gray (N4); SANDY in some areas; thinly bedded; breaks easily across some bedding planes; some slickensided surfaces	

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CLIENT AEP **PROJECT NAME** Gavin FAR Closure Site Investigation

PROJECT NUMBER CHE8273 **PROJECT LOCATION** Cheshire, OH

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY/ ATTEMPTED (RQD%)	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
230	RC 22	93" / 120"		SHALE - medium dark gray (N4); SANDY in some areas; thinly bedded; breaks easily across some bedding planes; some slickensided surfaces *(continued)*	
				231.0	540.8
235				2.5 ft - SHALE **PORTERSVILLE LIMESTONE** - grayish black (N2) 1.1 ft - MUDSTONE/SHALE **TOP OF ANDERSON CLAY** - medium bluish gray (5 B 5/1) 2.0 ft - SILTSTONE and CLAYSTONE - medium bluish gray (5 B 5/1); calcareous; 2-inch MUDSTONE seam	
240	RC 23	67" / 120"			
				241.0	530.8
245	RC 24	23" / 120"		0.3 ft - MUDSTONE/SHALE - as above from 231.0 to 241.0 ft 0.7 ft - LIMESTONE **BLOOMFIELD LIMESTONE** - light olive gray (5 Y 6/1) to medium bluish gray (5 B 5/1); massive 0.8 ft - CLAYSTONE/SHALE **TOP OF BLOOMFIELD CLAY** - medium bluish gray (5 B 5/1); calcareous	← Grout Seal

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Geosyntec consultants

WELL NUMBER RB12-01/MW-20

CLIENT AEP **PROJECT NAME** Gavin FAR Closure Site Investigation

PROJECT NUMBER CHE8273 **PROJECT LOCATION** Cheshire, OH

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY/ ATTEMPTED (RQD%)	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
250				0.3 ft - MUDSTONE/SHALE - as above from 231.0 to 241.0 ft 0.7 ft - LIMESTONE **BLOOMFIELD LIMESTONE** - light olive gray (5 Y 6/1) to medium bluish gray (5 B 5/1); massive 0.8 ft - CLAYSTONE/SHALE **TOP OF BLOOMFIELD CLAY** - medium bluish gray (5 B 5/1); calcareous *(continued)* 251.0 520.8	
255	RC 25	18" / 120"		CLAYSTONE/SHALE - as above from 241.0 to 251.0 ft; very soft	
260				261.0 510.8	

Bottom of borehole at 261.0 feet.

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Client: AEP-Gavin
Project: CHE8259A
Address: 7397 North State Route 7, Cheshire, OH

BORING LOG
Boring/Well No. 2016-03
Page: 1 of 4

Drilling Start Date:	03/18/2016 10:15	Boring Depth (ft):	75	Well Depth (ft):	52
Drilling End Date:	03/19/2016 10:45	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	Rock Core	Screen Slot (in):	0.010
Drilling Method:	Air Rotary	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:		DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Aaron Mackey	Top of Casing Elev. (ft):	661.11	Seal Material(s):	Bentonite Chips
Logged By:	C. Christensen	Location (X,Y):	N 350,727.9 E 2,101,388.6	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
0									Overburden. No samples collected. See 2016-04 log.		0
5											5
10											10
15											15
20											20

NOTES:

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Client: AEP-Gavin
Project: CHE8259A
Address: 7397 North State Route 7, Cheshire, OH

BORING LOG
Boring/Well No. 2016-03
Page: 2 of 4

Drilling Start Date:	03/18/2016 10:15	Boring Depth (ft):	75	Well Depth (ft):	52
Drilling End Date:	03/19/2016 10:45	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	Rock Core	Screen Slot (in):	0.010
Drilling Method:	Air Rotary	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:		DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Aaron Mackey	Top of Casing Elev. (ft):	661.11	Seal Material(s):	Bentonite Chips
Logged By:	C. Christensen	Location (X,Y):	N 350,727.9 E 2,101,388.6	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
20									Overburden. No samples collected. See 2016-04 log.		20
25				Run 1			48/ 120	77			25
30									(31') CLAYSTONE: moderately strong to weak, dusky red (10R 3/4), thickly bedded, moderately decomposed, slightly disintegrated, slightly fractured. [CLARKSBURGH RED BEDS]		30
35				Run 2			78/ 120	63	(34.5') SANDSTONE: moderately strong to strong, olive (5Y 5/6), fine grained, slightly decomposed, slightly disintegrated, intensely fractured, micaceous, non-calcareous. [MORGANTOWN]		35
40											40

NOTES:

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Client: AEP-Gavin
Project: CHE8259A
Address: 7397 North State Route 7, Cheshire, OH

BORING LOG
Boring/Well No. 2016-03

Drilling Start Date:	03/18/2016 10:15	Boring Depth (ft):	75	Well Depth (ft):	52
Drilling End Date:	03/19/2016 10:45	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	Rock Core	Screen Slot (in):	0.010
Drilling Method:	Air Rotary	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:		DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Aaron Mackey	Top of Casing Elev. (ft):	661.11	Seal Material(s):	Bentonite Chips
Logged By:	C. Christensen	Location (X,Y):	N 350,727.9 E 2,101,388.6	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
40											40
45				Run 3			84/ 120	86	(46') Red Mud/CLAYSHALE: weak to moderately strong, dusky red (10R 3/4), thickly bedded, moderately decomposed, slightly disintegrated, slightly fractured.		45
50											50
55				Run 4			48/ 120	33	(55') SANDSTONE: strong, olive (5Y 5/6), fine grained, cross-bedded, slightly decomposed, slightly disintegrated, intensely fractured. [MORGANTOWN]		55
60									(59') Sandy CLAYSHALE: strong, bluish gray (5B 5/1), thickly bedded, slightly decomposed,		60

NOTES:

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Client: AEP-Gavin
Project: CHE8259A
Address: 7397 North State Route 7, Cheshire, OH

BORING LOG
Boring/Well No. 2016-03
Page: 4 of 4

Drilling Start Date:	03/18/2016 10:15	Boring Depth (ft):	75	Well Depth (ft):	52
Drilling End Date:	03/19/2016 10:45	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	Rock Core	Screen Slot (in):	0.010
Drilling Method:	Air Rotary	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:		DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Aaron Mackey	Top of Casing Elev. (ft):	661.11	Seal Material(s):	Bentonite Chips
Logged By:	C. Christensen	Location (X,Y):	N 350,727.9 E 2,101,388.6	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
60									slightly disintegrated, slightly fractured, micaceous.		60
65				Run 5			24/ 120	50	(65.5') Round Knob Red-SHALE: moderately strong, dusky red (10R 3/4), thickly bedded, moderately decomposed, slightly disintegrated, slightly fractured.		65
70											70
75									End of borehole at 75 ft bgs. Well installed on 03/23/2016		75
80											80

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Client: AEP-Gavin
Project: CHE8259A
Address: 7397 North State Route 7, Cheshire, OH

BORING LOG
Boring/Well No. 2016-04
Page: 1 of 8

Drilling Start Date:	03/15/2016 08:30	Boring Depth (ft):	150	Well Depth (ft):	133
Drilling End Date:	03/17/2016 09:15	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	SPT & Rock Core	Screen Slot (in):	0.010
Drilling Method:	Air Rotary	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:		DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Aaron Mackey	Top of Casing Elev. (ft):	661.04	Seal Material(s):	Bentonite Chips
Logged By:	C. Christensen	Location (X,Y):	N 350,736.8 E 2,101,388.7	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	Date & Time	Blow Counts	Recovery (in)	N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
0				SPT-1		2 2 4 5	16/24	0.75	(0') Silty CLAY, dusky red (7.5R 3/2), damp, soft.		0
				SPT-2		5 9 19 19	16/24	0.75	(2') CLAY with sand, stiff, low plasticity, gray.		
				SPT-3		8 9 10 12	24/24	1.0	(3') SAND, brownish yellow (10YR 6/8), fine to medium grained, damp, soft.		
5				SPT-4		13 10 10 15	22/24	1.0	(6') Some clay lenses <1".		5
				SPT-5		9 9 12 8	20/24	0.75			
10				SPT-6		3 6 7 9	16/24	4.5	(11') CLAY, dark brown (7.5YR 3/4), dry, stiff, low plasticity.		10
				SPT-7		6 10 13 15	20/24	NA	(12') SAND lense, damp, low plasticity. (12.5') CLAY, gray (GLEY 1 6/N), dry, stiff, no plasticity.		
15				SPT-8		10 11 18 16	18/24	1.5	(14') Fly ASH, gray (GLEY 1 3/N), fine to medium grained, dry.		15
				SPT-9		22 19 19 20	20/24	1.25			
				SPT-10		12 18 15 15	18/24	0.75			
20											20

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Client: AEP-Gavin
Project: CHE8259A
Address: 7397 North State Route 7, Cheshire, OH

BORING LOG

Boring/Well No. 2016-04
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Drilling Start Date:	03/15/2016 08:30	Boring Depth (ft):	150	Well Depth (ft):	133
Drilling End Date:	03/17/2016 09:15	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	SPT & Rock Core	Screen Slot (in):	0.010
Drilling Method:	Air Rotary	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:		DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Aaron Mackey	Top of Casing Elev. (ft):	661.04	Seal Material(s):	Bentonite Chips
Logged By:	C. Christensen	Location (X,Y):	N 350,736.8 E 2,101,388.7	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	Date & Time	Blow Counts	Recovery (in)	N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
20				SPT-11		9 20 20 20	20/24	0.5			20
				SPT-12		20 12 7 5	18/24	2.5			
				SPT-13		8 10 12 13	14/24	>5	(23.5') Red CLAY with secondary yellow (2.5YR 4/3 and 2.5Y 6/8), dry, stiff, non-cohesive. [CLARKSBURGH RED BEDS]		
25				SPT-14		14 16 21 17	12/24	>5			25
				SPT-15		9 13 24 28	16/24	>5			
30				SPT-16		20 40 50/3	16/24	>5			30
				Run 1			72/96	43	(32') CLAYSTONE/MUDSHALE: red (10R 3/4). [CLARKSBURGH RED BEDS]	Begin coring at 32'.	
35									(34') SANDSTONE: calcareous near top (~2'), micaceous throughout, fine grained, olive gray (5Y 5/2), thickly bedded/cross-bedding, slightly to moderately decomposed, moderately disintegrated, intensely fractured. [MORGANTOWN]	Casing (6" PVC) set to 34'.	35
40											40

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Client: AEP-Gavin
Project: CHE8259A
Address: 7397 North State Route 7, Cheshire, OH

BORING LOG

Boring/Well No. 2016-04

Drilling Start Date:	03/15/2016 08:30	Boring Depth (ft):	150	Well Depth (ft):	133
Drilling End Date:	03/17/2016 09:15	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	SPT & Rock Core	Screen Slot (in):	0.010
Drilling Method:	Air Rotary	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:		DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Aaron Mackey	Top of Casing Elev. (ft):	661.04	Seal Material(s):	Bentonite Chips
Logged By:	C. Christensen	Location (X,Y):	N 350,736.8 E 2,101,388.7	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
40				Run 2			60/120	92	(40.5') Repeating bands of Red MUDSHALE (10R 3/4) and Sandy SHALE, dark greenish gray (5G 4/1), pyritic/micaceous, weak to moderately strong, medium bedded, highly to moderately decomposed, moderately disintegrated, slightly fractured.		40
45									(44') MUDSHALE/CLAYSHALE: red (10R 3/4), weak to moderately strong, thickly bedded, moderately to highly decomposed, slightly disintegrated, slightly fractured.		45
50				Run 3			60/120	68			50
55									(53.5') SANDSTONE: micaceous, pale olive (10Y 6/2), fine grained, cross-bedded, moderately strong to strong, slightly decomposed, slightly disintegrated, intensely fractured.		55
60											60

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Client: AEP-Gavin
Project: CHE8259A
Address: 7397 North State Route 7, Cheshire, OH

BORING LOG
Boring/Well No. 2016-04
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Drilling Start Date:	03/15/2016 08:30	Boring Depth (ft):	150	Well Depth (ft):	133
Drilling End Date:	03/17/2016 09:15	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	SPT & Rock Core	Screen Slot (in):	0.010
Drilling Method:	Air Rotary	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:		DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Aaron Mackey	Top of Casing Elev. (ft):	661.04	Seal Material(s):	Bentonite Chips
Logged By:	C. Christensen	Location (X,Y):	N 350,736.8 E 2,101,388.7	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
60				Run 4			60/120	58	(60') Sandy SHALE: very pyritic, bluish gray (5B 5/1), moderately strong to strong, fine grained, thickly bedded, some red mudshale lenses, slightly decomposed, slightly disintegrated, moderately to intensely fractured.		60
65											65
70				Run 5			48/120	46	(70') Round Knob Red SHALE: moderate red (5R 4/2), weak to moderately strong, fine grained, thickly bedded, highly decomposed, moderately to intensely disintegrated, intensely to very intensely fractured.		70
75											75
80											80

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Client: AEP-Gavin
Project: CHE8259A
Address: 7397 North State Route 7, Cheshire, OH

BORING LOG

Boring/Well No. 2016-04
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Drilling Start Date:	03/15/2016 08:30	Boring Depth (ft):	150	Well Depth (ft):	133
Drilling End Date:	03/17/2016 09:15	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	SPT & Rock Core	Screen Slot (in):	0.010
Drilling Method:	Air Rotary	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:		DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Aaron Mackey	Top of Casing Elev. (ft):	661.04	Seal Material(s):	Bentonite Chips
Logged By:	C. Christensen	Location (X,Y):	N 350,736.8 E 2,101,388.7	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
80				Run 6			30/120	37	(80') As above.		80
85											85
90				Run 7			30/120	73	(90') Round Knob Red SHALE: moderate red (5R 4/2) with secondary (5Y 5/6), moderately strong to weak, thickly bedded, moderately to highly decomposed, moderately to intensely disintegrated, moderately fractured.		90
95											95
100											100

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Client: AEP-Gavin
Project: CHE8259A
Address: 7397 North State Route 7, Cheshire, OH

BORING LOG
Boring/Well No. 2016-04
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Drilling Start Date:	03/15/2016 08:30	Boring Depth (ft):	150	Well Depth (ft):	133
Drilling End Date:	03/17/2016 09:15	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	SPT & Rock Core	Screen Slot (in):	0.010
Drilling Method:	Air Rotary	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:		DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Aaron Mackey	Top of Casing Elev. (ft):	661.04	Seal Material(s):	Bentonite Chips
Logged By:	C. Christensen	Location (X,Y):	N 350,736.8 E 2,101,388.7	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
100				Run 8			78/120	59	(100') Round Knob Red SHALE: moderately strong, moderate red (5R 5/2), no secondary color, thickly bedded, moderately decomposed, moderately disintegrated, intensely fractured (100'-103').		100
105											105
110				Run 9			54/120	22	(110.5') SANDSTONE: calcareous, lightly micaceous. [COW RUN]		110
115									(112') SANDSTONE: lightly micaceous, moderately strong to strong, fine grained, cross-bedded, slightly decomposed, slightly disintegrated, intensely fractured at 113'. [COW RUN]		115
120											120

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Client: AEP-Gavin
Project: CHE8259A
Address: 7397 North State Route 7, Cheshire, OH

BORING LOG
Boring/Well No. 2016-04
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Drilling Start Date:	03/15/2016 08:30	Boring Depth (ft):	150	Well Depth (ft):	133
Drilling End Date:	03/17/2016 09:15	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	SPT & Rock Core	Screen Slot (in):	0.010
Drilling Method:	Air Rotary	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:		DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Aaron Mackey	Top of Casing Elev. (ft):	661.04	Seal Material(s):	Bentonite Chips
Logged By:	C. Christensen	Location (X,Y):	N 350,736.8 E 2,101,388.7	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
120				Run 10			114/ 120	91	(120') SANDSTONE: strong to very strong, bluish gray (5B 5/1), fine grained, fresh to slightly decomposed, slightly disintegrated, slightly fractured, micaceous, lightly calcareous. [COW RUN]		120
125											125
130				Run 11			108/ 120	61	(131') Sandy CLAYSHALE: moderately strong to strong, calcareous, bluish gray (5B 5/1), thickly bedded, slightly decomposed, slightly disintegrated, intensely fractured at ~132', moderate fractures throughout. [COW RUN]		130
135											135
140											140

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Client: AEP-Gavin
Project: CHE8259A
Address: 7397 North State Route 7, Cheshire, OH

BORING LOG
Boring/Well No. 2016-04
Page: 8 of 8

Drilling Start Date:	03/15/2016 08:30	Boring Depth (ft):	150	Well Depth (ft):	133
Drilling End Date:	03/17/2016 09:15	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	SPT & Rock Core	Screen Slot (in):	0.010
Drilling Method:	Air Rotary	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:		DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Aaron Mackey	Top of Casing Elev. (ft):	661.04	Seal Material(s):	Bentonite Chips
Logged By:	C. Christensen	Location (X,Y):	N 350,736.8 E 2,101,388.7	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
140				Run 12			120/ 120	91	(140') Sandy CLAYSHALE: micaceous, moderately strong to strong, bluish gray (5B 5/1), thickly bedded, slightly decomposed, slightly disintegrated, slightly fractured. [COW RUN]		140
									End of [COW RUN]		
145									(143') Layered CLAYSHALE/MUDSTONE: bluish gray (5B 5/1) and red (10R 3/4), moderately strong, medium bedded, slightly decomposed, slightly disintegrated, slightly fractured.		145
150									End of borehole at 150 ft bgs. Well installed on 03/28/2016		150
155											155

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Client: AEP-Gavin
Project: CHE8259A
Address: 7397 North State Route 7, Cheshire, OH

BORING LOG
Boring/Well No. 2016-05
Page: 1 of 3

Drilling Start Date:	03/08/2016 14:00	Boring Depth (ft):	60	Well Depth (ft):	54
Drilling End Date:	03/09/2016 08:50	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	Rock Core	Screen Slot (in):	0.010
Drilling Method:	Air Rotary	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:		DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:		Top of Casing Elev. (ft):	650.97	Seal Material(s):	Bentonite Chips
Logged By:	M. Muenich	Location (X,Y):	N 351,787.1 E 2,101,641.7	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
0									Blind drilled 0-20'. See log 2016-06 for lithology.		0
5											5
10											10
15											15
20										Set 20' of 8" PVC casing.	20

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Client: AEP-Gavin
Project: CHE8259A
Address: 7397 North State Route 7, Cheshire, OH

BORING LOG
Boring/Well No. 2016-05
Page: 2 of 3

Drilling Start Date:	03/08/2016 14:00	Boring Depth (ft):	60	Well Depth (ft):	54
Drilling End Date:	03/09/2016 08:50	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	Rock Core	Screen Slot (in):	0.010
Drilling Method:	Air Rotary	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:		DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:		Top of Casing Elev. (ft):	650.97	Seal Material(s):	Bentonite Chips
Logged By:	M. Muenich	Location (X,Y):	N 351,787.1 E 2,101,641.7	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
20				Run 1			104/ 120	47	(20') CLAYSTONE/CLAYSHALE: moderately strong, dark reddish brown (10R 3/4), moderately decomposed, moderately disintegrated. [CLARKSBURGH RED BEDS]	Begin coring @ 16:00	20
									(20.1') SANDSTONE/Sandy SHALE: fine grained, cross-bedded, micaceous, light olive gray (5Y 5/2), strong, slightly decomposed, slightly disintegrated, moderately fractured. [MORGANTOWN]		
25									(26') CLAYSTONE/CLAYSHALE: moderately strong, calcareous nodules, moderate red (5R 4/6) and very dark red (5R 2/6), massive, slightly to moderately decomposed, moderately disintegrated, moderately to intensely fractured. [INTER-MORGANTOWN]		25
30				Run 2			7/ 120	0	(30') Changes to intensely disintegrated, very intensely fractured.		30
35											35
40											40

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Client: AEP-Gavin
Project: CHE8259A
Address: 7397 North State Route 7, Cheshire, OH

BORING LOG
Boring/Well No. 2016-05
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Drilling Start Date:	03/08/2016 14:00	Boring Depth (ft):	60	Well Depth (ft):	54
Drilling End Date:	03/09/2016 08:50	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	Rock Core	Screen Slot (in):	0.010
Drilling Method:	Air Rotary	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:		DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:		Top of Casing Elev. (ft):	650.97	Seal Material(s):	Bentonite Chips
Logged By:	M. Muenich	Location (X,Y):	N 351,787.1 E 2,101,641.7	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
40				Run 3			55/ 120	22			40
									(42.5') Silty SANDSTONE: strong to very strong, pale olive (10Y 6/2) and olive gray (5Y 3/2), micaceous, strongly cross-bedded, fine grained, fresh to slightly decomposed, competent to slightly disintegrated, moderately fractured. [MORGANTOWN]		
45											45
50				Run 4			75/ 120	30	(50') SANDSTONE: very strong, light bluish gray (5B 7/1), fine grained, micaceous, calcareous, fresh, competent, moderately to intensely fractured. [MORGANTOWN] End of [MORGANTOWN]		50
									(52.5') Sandy, silty SHALE: moderately strong to strong, dark greenish gray (5G 4/1), pyritic, slightly decomposed, intensely disintegrated, slightly fractured.		
55									(54') CLAYSTONE/CLAYSHALE: weak to moderately strong, very dark red (5R 2/6), moderately decomposed, intensely disintegrated, intensely fractured.	17:15 Stop drilling for day @ 55'; out of water. Continue drilling on 03/09/2016	55
									Well installed on 03/29/2016		
60									End of borehole at 60 ft bgs.	Finish coring @ 08:50 03/09/2016	60

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Client: AEP-Gavin
Project: CHE8259A
Address: 7397 North State Route 7, Cheshire, OH

BORING LOG
Boring/Well No. 2016-06
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Drilling Start Date:	03/06/2016 14:20	Boring Depth (ft):	140	Well Depth (ft):	122
Drilling End Date:	03/08/2016 08:50	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	SPT & Rock Core	Screen Slot (in):	0.010
Drilling Method:	Air Rotary	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:		DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:		Top of Casing Elev. (ft):	651.10	Seal Material(s):	Bentonite Chips
Logged By:	M. Muenich	Location (X,Y):	N 351,789.1 E 2,101,632.9	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	Date & Time	Blow Counts	Recovery (in)	N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
0				SS-1		2 3 3 2	12/24	1.5	(0') Lean CLAY (CL); soft, moist to wet, reddish brown, medium plasticity, trace fine to coarse sand, trace fine gravel.		0
				SS-2		3 6 6 6	10/24	3.5	(3') Changes to dry to moist, low plasticity, stiff.		
5				SS-3		4 3 5 7	12/24	3			5
				SS-4		6 7 9 6	14/24	2	(6') Changes to gray (10YR 6/1) with yellow (10YR 7/6) mottled.		
				SS-5		2 5 8 18	11/24	3.5			
10				SS-6		3 8 11 15	10/24	4	(10') Changes to weak red (10R 4/3).		10
				SS-7		31 28 29 28	16/24	>4	(12') Changes to hard, dry, dusky red (10R 3/3), trace to few fine to coarse sand, fine gravel, few to little silt.	12-16' possibly in Clarksburgh Red Beds.	
				SS-8		15 13 25 29	18/24	>4	(14') Changes to light reddish brown.		
15				SS-9		25 50 55	5/24	>4	(16') Changes to weak red (7.5R 4/3).	50 over 6" Split Spoon refusl @ 18'; will auger and log from cuttings.	15
									(19') LIMESTONE: light gray (N7), ervescent, (logged from cuttings).		
20											20

NOTES:

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Client: AEP-Gavin
Project: CHE8259A
Address: 7397 North State Route 7, Cheshire, OH

BORING LOG
Boring/Well No. 2016-06
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Drilling Start Date:	03/06/2016 14:20	Boring Depth (ft):	140	Well Depth (ft):	122
Drilling End Date:	03/08/2016 08:50	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	SPT & Rock Core	Screen Slot (in):	0.010
Drilling Method:	Air Rotary	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:		DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:		Top of Casing Elev. (ft):	651.10	Seal Material(s):	Bentonite Chips
Logged By:	M. Muenich	Location (X,Y):	N 351,789.1 E 2,101,632.9	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
20									(21') Interbedded, limestone and shale, likely weak to moderate.		20
				Run 1					(23') Silty SANDSTONE: fine grained, strong, greenish gray (5GY 6/1), medium bedded, slightly decomposed, slightly disintegrated, moderately fractured, micaceous, cross-bedded. [MORGANTOWN]	Begin coring @ 23' on 03/7/2016 @ 10:45	
25									(25') SHALE and SILTSTONE: strong, dusky red (5R 3/4) and dusky yellow green (5GY 5/2), fine grained, thinly interbedded, moderately decomposed, moderately disintegrated, moderately fractured. [MORGANTOWN]		25
30				Run 2			49/120	20	(30') CLAYSTONE/CLAYSHALE: weak to moderately strong, pale reddish brown (10R 5/4), very dusky purple, massive, calcareous nodules throughout, moderately decomposed, slightly disintegrated, moderately fractured, occasional slickensides. [INTER-MORGANTOWN]		30
									(32') Changes to highly decomposed, intensely disintegrated, intensely fractured.		
35											35
40											40

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Address: 7397 North State Route 7, Cheshire, OH

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Drilling Start Date:	03/06/2016 14:20	Boring Depth (ft):	140	Well Depth (ft):	122
Drilling End Date:	03/08/2016 08:50	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	SPT & Rock Core	Screen Slot (in):	0.010
Drilling Method:	Air Rotary	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:		DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:		Top of Casing Elev. (ft):	651.10	Seal Material(s):	Bentonite Chips
Logged By:	M. Muenich	Location (X,Y):	N 351,789.1 E 2,101,632.9	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
40				Run 3			101/120	79	(41') Changes to slightly to moderately fractured. (41.5') 3" 45° fracture. (43.5') 45° slickenside.		40
45											45
50				Run 4			70/120	14	(50') Silty SANDSTONE: fine grained, moderately strong, cross-bedded, micaceous, light olive gray (5Y 6/1), massive, fresh, slightly disintegrated, intensely fractured. [MORGANTOWN] (52.5') Sandy, silty SHALE and Silty SANDSTONE: thinly bedded, pyritic, light olive gray (5Y 6/1), moderately strong, slightly decomposed, moderately to intensely disintegrated (shale), intensely fractured. (53.5') Changes to calcareous sandy, silty SHALE, pyritic. (56') CLAYSTONE: moderately strong to strong, very dusky purple (5RP 2/2) and light olive green (5Y 5/6), calcareous limestone nodules throughout, many slickenside throughout, slightly to moderately fractured, moderately decomposed, moderately disintegrated.		50
55											55
60											60

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Project: CHE8259A
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Drilling Start Date:	03/06/2016 14:20	Boring Depth (ft):	140	Well Depth (ft):	122
Drilling End Date:	03/08/2016 08:50	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	SPT & Rock Core	Screen Slot (in):	0.010
Drilling Method:	Air Rotary	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:		DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:		Top of Casing Elev. (ft):	651.10	Seal Material(s):	Bentonite Chips
Logged By:	M. Muenich	Location (X,Y):	N 351,789.1 E 2,101,632.9	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
60				Run 5			61/120	32			60
65											65
70				Run 6			40/120	12	(71') Changes to intensely disintegrated, intensely fractured.		70
75											75
80											80

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Drilling Start Date:	03/06/2016 14:20	Boring Depth (ft):	140	Well Depth (ft):	122
Drilling End Date:	03/08/2016 08:50	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	SPT & Rock Core	Screen Slot (in):	0.010
Drilling Method:	Air Rotary	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:		DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:		Top of Casing Elev. (ft):	651.10	Seal Material(s):	Bentonite Chips
Logged By:	M. Muenich	Location (X,Y):	N 351,789.1 E 2,101,632.9	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
80				Run 7			66/120	37			80
									(83') CLAYSTONE/CLAYSHALE: strong, dusky red (5R 3/4), massive, slightly decomposed, slightly disintegrated, moderately fractured. [ROUND KNOB RED SHALE]		
85											85
90				Run 8			30/120	14			90
95									(98') Changes to moderately to highly decomposed, intensely disintegrated, intensely fractured.		95
100											100

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Drilling Start Date:	03/06/2016 14:20	Boring Depth (ft):	140	Well Depth (ft):	122
Drilling End Date:	03/08/2016 08:50	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	SPT & Rock Core	Screen Slot (in):	0.010
Drilling Method:	Air Rotary	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:		DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:		Top of Casing Elev. (ft):	651.10	Seal Material(s):	Bentonite Chips
Logged By:	M. Muenich	Location (X,Y):	N 351,789.1 E 2,101,632.9	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
100				Run 9			100/120	49			100
									(103') Sandy SHALE: strong to very strong, dark greenish gray (5G 4/1), fine grained, massive, trace calcareous nodules, slightly decomposed, slightly to moderately disintegrated, slightly to moderately fractured. [COW RUN]		
105											105
110				Run 10			105/120	22			110
									(112') Silty SANDSTONE: fine grained, very strong, medium light gray (N6), cross-bedded, fresh, competent, intensely fractured. [COW RUN]		
115									(115') Sandy SHALE: strong to very strong, dark greenish gray (5G 4/1), fine grained, massive, trace calcareous nodules, slightly decomposed, slightly disintegrated, slightly to moderately fractured. [COW RUN]		115
120											120

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Drilling Start Date:	03/06/2016 14:20	Boring Depth (ft):	140	Well Depth (ft):	122
Drilling End Date:	03/08/2016 08:50	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	SPT & Rock Core	Screen Slot (in):	0.010
Drilling Method:	Air Rotary	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:		DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:		Top of Casing Elev. (ft):	651.10	Seal Material(s):	Bentonite Chips
Logged By:	M. Muenich	Location (X,Y):	N 351,789.1 E 2,101,632.9	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
120				Run 11			110/ 120	38			120
125										Stop drilling for day.	125
130				Run 12			49/ 120	14		Continue drilling on 03/08/2016 @ 08:50	130
135									(131') CLAYSTONE/SHALE: weak to moderately strong, dark reddish brown (10R 3/4) and light olive brown (5Y 5/6), massive, highly decomposed, intensely disintegrated, moderately to intensely fractured.		135
140									Well installed on 03/29/2016 End of borehole at 140 ft bgs.	Finish coring on 03/08/2016 @ 09:50	140

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BORING LOG
Boring/Well No. 2016-07
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Drilling Start Date:	03/18/2016 11:00	Boring Depth (ft):	131	Well Depth (ft):	103
Drilling End Date:	03/18/2016 17:40	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	Rock Core	Screen Slot (in):	0.010
Drilling Method:	Sonic	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:	Versa-Sonic	DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Rob Hamilton	Top of Casing Elev. (ft):	731.45	Seal Material(s):	Bentonite Chips
Logged By:	C. Christensen	Location (X,Y):	N 352,403.8 E 2,100,399.0	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
0									Overburden. No samples. See 2016-08.		0
5											5
10											10
15											15
20											20

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Client: AEP-Gavin
Project: CHE8259A
Address: 7397 North State Route 7, Cheshire, OH

BORING LOG
Boring/Well No. 2016-07
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Drilling Start Date:	03/18/2016 11:00	Boring Depth (ft):	131	Well Depth (ft):	103
Drilling End Date:	03/18/2016 17:40	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	Rock Core	Screen Slot (in):	0.010
Drilling Method:	Sonic	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:	Versa-Sonic	DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Rob Hamilton	Top of Casing Elev. (ft):	731.45	Seal Material(s):	Bentonite Chips
Logged By:	C. Christensen	Location (X,Y):	N 352,403.8 E 2,100,399.0	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
20									Overburden. No samples. See 2016-08.		20
25											25
30											30
35											35
40											40

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Drilling Start Date:	03/18/2016 11:00	Boring Depth (ft):	131	Well Depth (ft):	103
Drilling End Date:	03/18/2016 17:40	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	Rock Core	Screen Slot (in):	0.010
Drilling Method:	Sonic	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:	Versa-Sonic	DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Rob Hamilton	Top of Casing Elev. (ft):	731.45	Seal Material(s):	Bentonite Chips
Logged By:	C. Christensen	Location (X,Y):	N 352,403.8 E 2,100,399.0	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
40									Overburden. No samples. See 2016-08.		40
45											45
50											50
55											55
60											60

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Drilling Start Date:	**03/18/2016 11:00**	Boring Depth (ft):	**131**	Well Depth (ft):	**103**
Drilling End Date:	**03/18/2016 17:40**	Boring Diameter (in):	**6**	Well Diameter (in):	**2**
Drilling Company:	**Frontz Drilling**	Sampling Method(s):	**Rock Core**	Screen Slot (in):	**0.010**
Drilling Method:	**Sonic**	DTW During Drilling (ft):		Riser Material:	**Sch 80 PVC**
Drilling Equipment:	**Versa-Sonic**	DTW After Drilling (ft):		Screen Material:	**Sch 80 PVC 4" Pre-packed**
Driller:	**Rob Hamilton**	Top of Casing Elev. (ft):	**731.45**	Seal Material(s):	**Bentonite Chips**
Logged By:	**C. Christensen**	Location (X,Y):	**N 352,403.8 E 2,100,399.0**	Filter Pack:	**Sidley #5 & #7 (Choker Sand)**

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
60									Overburden. No samples. See 2016-08.		60
65											65
70											70
75											75
80											80

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Drilling Start Date:	03/18/2016 11:00	Boring Depth (ft):	131	Well Depth (ft):	103
Drilling End Date:	03/18/2016 17:40	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	Rock Core	Screen Slot (in):	0.010
Drilling Method:	Sonic	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:	Versa-Sonic	DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Rob Hamilton	Top of Casing Elev. (ft):	731.45	Seal Material(s):	Bentonite Chips
Logged By:	C. Christensen	Location (X,Y):	N 352,403.8 E 2,100,399.0	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
80									Overburden. No samples. See 2016-08.		80
85				Run 1			42/60	21	(85') CLAYSTONE: red (10R 3/4), weak, thickly bedded, highly to moderately decomposed, moderately disintegrated, intensely fractured. [CLARKSBURGH RED BEDS]		85
90				Run 2			84/ 120	78	(91.5') Sandy SHALE: lightly micaceous, calcareous between 91.5-95, strong to moderately strong, fine grained, thickly bedded, slightly decomoposed, slightly disintegrated. [MORGANTOWN]		90
95									(96') MUDSTONE/CLAYSHALE: red (10R 3/4), weak.		95
100									(97') SANDSTONE: moderately strong to strong, fine grained, cross-bedded, moderately decomposed, slightly disintegrated, moderately fractured, very pyritic, calcareous. [MORGANTOWN]		100

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Drilling Start Date:	03/18/2016 11:00	Boring Depth (ft):	131	Well Depth (ft):	103
Drilling End Date:	03/18/2016 17:40	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	Rock Core	Screen Slot (in):	0.010
Drilling Method:	Sonic	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:	Versa-Sonic	DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Rob Hamilton	Top of Casing Elev. (ft):	731.45	Seal Material(s):	Bentonite Chips
Logged By:	C. Christensen	Location (X,Y):	N 352,403.8 E 2,100,399.0	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
100				Run 3			96/ 120	27	(101.5-102.5') Highly fractured.		100
									(104') Intensely fractured.		
105									(105') CLAYSHALE/MUDSTONE: very weak, red (10R 3/4), thickly bedded, highly decomposed, intensely disintegrated, very intensely fractured.		105
110				Run 4			90/ 120		(111') Red MUDSHALE with blue Sandy SHALE: red (10R 3/4) and blue (5B 5/1), calcareous, thickly bedded, moderately strong to strong, moderately decomposed, slightly disintegrated, slightly fractured.		110
115											115
120											120

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Drilling Start Date:	**03/18/2016 11:00**	Boring Depth (ft):	**131**	Well Depth (ft):	**103**
Drilling End Date:	**03/18/2016 17:40**	Boring Diameter (in):	**6**	Well Diameter (in):	**2**
Drilling Company:	**Frontz Drilling**	Sampling Method(s):	**Rock Core**	Screen Slot (in):	**0.010**
Drilling Method:	**Sonic**	DTW During Drilling (ft):		Riser Material:	**Sch 80 PVC**
Drilling Equipment:	**Versa-Sonic**	DTW After Drilling (ft):		Screen Material:	**Sch 80 PVC 4" Pre-packed**
Driller:	**Rob Hamilton**	Top of Casing Elev. (ft):	**731.45**	Seal Material(s):	**Bentonite Chips**
Logged By:	**C. Christensen**	Location (X,Y):	**N 352,403.8 E 2,100,399.0**	Filter Pack:	**Sidley #5 & #7 (Choker Sand)**

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
120											120
				Run 5			120/ 120	69	(121') Layered red MUDSHALE with blue Sandy SHALE: red (10R 3/4) and blue (5B 5/1), moderately strong, thickly bedded, moderately decomposed, slightly disintegrated, slightly fractured.		
125											125
									(127') SANDSTONE: strong, very pyritic, blue (5B 5/1), cross-bedded, slightly decomposed, slightly disintegrated, moderately to intensely fractured, calcareous.		
130											130
									End of borehole at 131 ft bgs. Well installed on 03/29/2016		
135											135

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Client: AEP-Gavin
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BORING LOG
Boring/Well No. 2016-08
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Drilling Start Date:	03/14/2016 13:00	Boring Depth (ft):	221	Well Depth (ft):	192
Drilling End Date:	03/16/2016 16:00	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	Sonic & Rock Core	Screen Slot (in):	0.010
Drilling Method:	Sonic	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:	Versa-Sonic	DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Rob Hamilton	Top of Casing Elev. (ft):	731.39	Seal Material(s):	Bentonite Chips
Logged By:	Chad Gregory	Location (X,Y):	N 352,403.8 E 2,100,409.0	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
0				SC			48/60		(0') Sandy CLAY (CL); medium plasticity, brown (5YR 4/4), some dark brown and yellowish mottling, dry, ppen 2.0.		0
5				SC			54/60		(8') Clayey SILT (ML); very dense, some very thin uneven bedding, dense clay inclusions.		5
10				SC			90/120		(10') As above: brown (5YR 4/2) to yellowish red (5YR 5/6).		10
15											15
20											20

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Client: AEP-Gavin
Project: CHE8259A
Address: 7397 North State Route 7, Cheshire, OH

BORING LOG
Boring/Well No. 2016-08
Page: 2 of 12

Drilling Start Date:	**03/14/2016 13:00**	Boring Depth (ft):	**221**	Well Depth (ft):	**192**
Drilling End Date:	**03/16/2016 16:00**	Boring Diameter (in):	**6**	Well Diameter (in):	**2**
Drilling Company:	**Frontz Drilling**	Sampling Method(s):	**Sonic & Rock Core**	Screen Slot (in):	**0.010**
Drilling Method:	**Sonic**	DTW During Drilling (ft):		Riser Material:	**Sch 80 PVC**
Drilling Equipment:	**Versa-Sonic**	DTW After Drilling (ft):		Screen Material:	**Sch 80 PVC 4" Pre-packed**
Driller:	**Rob Hamilton**	Top of Casing Elev. (ft):	**731.39**	Seal Material(s):	**Bentonite Chips**
Logged By:	**Chad Gregory**	Location (X,Y):	**N 352,403.8 E 2,100,409.0**	Filter Pack:	**Sidley #5 & #7 (Choker Sand)**

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
20				SC			110/120		(20') Sandy CLAY (CL); brown (5YR 4/3), hard.	20-30' wet from drill fluids.	20
25									(26') SAND (SP); fine grained, dark brown (5YR 2.5/2), loose. [BOTTOM ASH]		25
									(26.5') SILT (ML); very dense, tan to gray to yellowish brown, some very thin bedding.		
30				SC			105/120		(30') Silty, sandy CLAY (CL); brown (7.5YR 4/2), very stiff to hard, medium to high plasticity.	30-40' wet from drill fluids.	30
35											35
40									(39.5') CLAYSTONE cobbles: moderately strong,		40

NOTES:

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Client: AEP-Gavin
Project: CHE8259A
Address: 7397 North State Route 7, Cheshire, OH

BORING LOG
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Drilling Start Date:	03/14/2016 13:00	Boring Depth (ft):	221	Well Depth (ft):	192
Drilling End Date:	03/16/2016 16:00	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	Sonic & Rock Core	Screen Slot (in):	0.010
Drilling Method:	Sonic	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:	Versa-Sonic	DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Rob Hamilton	Top of Casing Elev. (ft):	731.39	Seal Material(s):	Bentonite Chips
Logged By:	Chad Gregory	Location (X,Y):	N 352,403.8 E 2,100,409.0	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
40				Run 1			6/12	0	reddish brown.		40
				Run 2			103/ 120	88	(40') CLAYSTONE: very weak, light gray to moderate red (5R 4/6), intensely fractured, highly decomposed. (41') Changing to dusky red (5R 3/4) to medium gray (N5), weak, slightly fractured, moderately decomposed.		
45											45
50				Run 3			84/ 120	85			50
									(53') Changing to slightly sandy.		
55											55
60											60

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Client: AEP-Gavin
Project: CHE8259A
Address: 7397 North State Route 7, Cheshire, OH

BORING LOG
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Drilling Start Date:	03/14/2016 13:00	Boring Depth (ft):	221	Well Depth (ft):	192
Drilling End Date:	03/16/2016 16:00	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	Sonic & Rock Core	Screen Slot (in):	0.010
Drilling Method:	Sonic	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:	Versa-Sonic	DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Rob Hamilton	Top of Casing Elev. (ft):	731.39	Seal Material(s):	Bentonite Chips
Logged By:	Chad Gregory	Location (X,Y):	N 352,403.8 E 2,100,409.0	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
60									(60') Changing to grayish black (N2) with few thin beds, light gray to yellowish brown to red.		60
				Run 4			28/ 120	32	(61') LIMESTONE: dusky blue/green (5BG 3/2) to light olive brown (5Y 5/6), weak, highly decomposed, slickensides, clayey.		
65											65
70				Run 5			40/ 120	50	(71') CLAYSTONE: dusky blue/green (5BG 3/2) to dark greenish yellow (10Y 6/6), weak, moderately decomposed, moderately disintegrated, few moderately brown clay nodules.		70
75											75
80											80

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Project: CHE8259A
Address: 7397 North State Route 7, Cheshire, OH

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Drilling Start Date:	03/14/2016 13:00	Boring Depth (ft):	221	Well Depth (ft):	192
Drilling End Date:	03/16/2016 16:00	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	Sonic & Rock Core	Screen Slot (in):	0.010
Drilling Method:	Sonic	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:	Versa-Sonic	DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Rob Hamilton	Top of Casing Elev. (ft):	731.39	Seal Material(s):	Bentonite Chips
Logged By:	Chad Gregory	Location (X,Y):	N 352,403.8 E 2,100,409.0	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
80				Run 6			58/120	52	(81.5') Slickensided fracture. (82.5') Changing to moderate red (5R 4/6), some dusky blue/green (5BG 3/2) to greenish yellow (10Y 6/6) veins, intensely fractured, few slickensides. [LOWER CLARKSBURGH RED BEDS]		80
85											85
90				Run 7			117/120	98	(89') Changing to slightly calcareous. (91') Silty SANDSTONE: fine grained, strong, slightly decomposed, slightly fractured, light to dark gray. [MORGANTOWN]		90
95									(95.5') CLAYSHALE: dark red (5R 2/6), strong. (96.5') SANDSTONE: light gray (N7), strong, slightly fractured, fine grained.		95
100									(98.5') CLAYSHALE: medium to dark gray (N5 to N3), moderately strong, sandy.		100

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Drilling Start Date:	03/14/2016 13:00	Boring Depth (ft):	221	Well Depth (ft):	192
Drilling End Date:	03/16/2016 16:00	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	Sonic & Rock Core	Screen Slot (in):	0.010
Drilling Method:	Sonic	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:	Versa-Sonic	DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Rob Hamilton	Top of Casing Elev. (ft):	731.39	Seal Material(s):	Bentonite Chips
Logged By:	Chad Gregory	Location (X,Y):	N 352,403.8 E 2,100,409.0	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
100				Run 8			69/120	57	(100') SANDSTONE: fine grained, micaceous, thinly bedded, cross bedded, strong, light to medium gray, slightly fractured, slightly decomposed, very micaceous 102-104'.		100
									(104') Sandy CLAYSHALE: weak, medium gray to dark reddish brown, highly decomposed, highly disintegrated.		
105									(105') CLAYSTONE: weak, medium gray, limestone nodules, highly fractured, moderately decomposed, moderately disintegrated, changing to dark reddish brown (10R 3/4) at 106'.		105
110				Run 9			112/120	87	(111') Silty SANDSTONE: gray, strong, fine grained.		110
									(112') As above: less silty.		
									End of [MORGANTOWN]		
115									(113') CLAYSHALE: moderately strong, medium gray, limestone nodules, changing at 114.5' to dark reddish brown, strong, calcareous, slightly fractured.		115
									(118') Slickensided fracture.		
									(119-120') Medium dark gray.		
120											120

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Drilling Start Date:	03/14/2016 13:00	Boring Depth (ft):	221	Well Depth (ft):	192
Drilling End Date:	03/16/2016 16:00	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	Sonic & Rock Core	Screen Slot (in):	0.010
Drilling Method:	Sonic	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:	Versa-Sonic	DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Rob Hamilton	Top of Casing Elev. (ft):	731.39	Seal Material(s):	Bentonite Chips
Logged By:	Chad Gregory	Location (X,Y):	N 352,403.8 E 2,100,409.0	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
120				Run 10			120/ 120	78	(121') Changing to strong, very dark red (5R 2/6), moderately fractured.		120
									(123.5') LIMESTONE: dark greenish gray (5G 4/1) to dark reddish brown, moderately decomposed, moderately disintegrated, sandy.		
125									(124.5') Sandy CLAYSHALE: pyritic, dark greenish gray to light gray, calcareous, moderately fractured.		125
									(129') Changing to dark reddish brown (10R 3/4), not pyritic, less calcareous.		
130				Run 11			69/84	83			130
									(132') LIMESTONE: medium reddish brown, dark greenish yellow nodules (10Y 6/6), few white veins, many slickensides, clayey.		
135									(136') More frequent dusky blue green mottling (5BG 3/2).		135
				Run 12			0/36		(138') No Recovery.		
140											140

NOTES:

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Drilling Start Date:	03/14/2016 13:00	Boring Depth (ft):	221	Well Depth (ft):	192
Drilling End Date:	03/16/2016 16:00	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	Sonic & Rock Core	Screen Slot (in):	0.010
Drilling Method:	Sonic	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:	Versa-Sonic	DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Rob Hamilton	Top of Casing Elev. (ft):	731.39	Seal Material(s):	Bentonite Chips
Logged By:	Chad Gregory	Location (X,Y):	N 352,403.8 E 2,100,409.0	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
140										Sonic crew cleared out borehole @ 141'	140
				Run 13			82/ 120	73	(141') CLAYSTONE: calcareous, dark greenish yellow/light blue green/dusky blue green mottled, moderately fractured, many slickensides, strong.		
145											145
									(149') No Recovery.		
150				Run 14			80/ 120	43	(151') LIMESTONE: greenish gray (5G 6/1), strong, massive, moderately decomposed, moderately disintegrated, intensely fractured.		150
									(151.5') CLAYSTONE: calcareous, dusky blue green to dark greenish yellow, weak, intensely fractured, slickensided (152-153'), moderately decomposed, moderately disintegrated.		
155											155
160											160

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Drilling Start Date:	03/14/2016 13:00	Boring Depth (ft):	221	Well Depth (ft):	192
Drilling End Date:	03/16/2016 16:00	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	Sonic & Rock Core	Screen Slot (in):	0.010
Drilling Method:	Sonic	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:	Versa-Sonic	DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Rob Hamilton	Top of Casing Elev. (ft):	731.39	Seal Material(s):	Bentonite Chips
Logged By:	Chad Gregory	Location (X,Y):	N 352,403.8 E 2,100,409.0	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
160				Run 15			60/60	57	(161') Changing to moderately strong, dark reddish brown.		160
165				Run 16			60/60	50	(167') Changing to very weak, intensely fractured, dusky blue green to dark greenish yellow.		165
170				Run 17			75/ 120	92	(171') Changing to moderately strong, dusky blue green to dark reddish brown, slickensided, highly fractured, white calcareous nodules.		170
175									(174') CLAYSHALE: strong, dark reddish brown to dusky blue green, white calcareous veins. (176.5') Slickensided fracture. (177-178') Few thin sandstone beds.		175
180											180

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Drilling Start Date:	03/14/2016 13:00	Boring Depth (ft):	221	Well Depth (ft):	192
Drilling End Date:	03/16/2016 16:00	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	Sonic & Rock Core	Screen Slot (in):	0.010
Drilling Method:	Sonic	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:	Versa-Sonic	DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Rob Hamilton	Top of Casing Elev. (ft):	731.39	Seal Material(s):	Bentonite Chips
Logged By:	Chad Gregory	Location (X,Y):	N 352,403.8 E 2,100,409.0	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
180				Run 18			117/ 120	74	(181.5') SANDSTONE: medium dark gray (N4), thinly bedded, cross-bedded, strong, fine grained. [COW RUN]		180
									(182') Sandy SHALE: medium dark gray to grayish black, moderately fractured, weak to moderately strong, occasional interbedded sandstone.		
185											185
190				Run 19			116/ 120	78	(191') Changing to pyritic.		190
									(194-195') Intensely fractured (shale).		
195									(196-197') Very weak.		195
200											200

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Drilling Start Date:	03/14/2016 13:00	Boring Depth (ft):	221	Well Depth (ft):	192
Drilling End Date:	03/16/2016 16:00	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	Sonic & Rock Core	Screen Slot (in):	0.010
Drilling Method:	Sonic	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:	Versa-Sonic	DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Rob Hamilton	Top of Casing Elev. (ft):	731.39	Seal Material(s):	Bentonite Chips
Logged By:	Chad Gregory	Location (X,Y):	N 352,403.8 E 2,100,409.0	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
200				Run 20			102/ 120	75	(202') Changing to weak, intensely fractured, wet.		200
205									(204') Changing to medium reddish brown and medium gray layers, less sandy, more clayey.		205
									End of [COW RUN]		
									(208') CLAYSTONE: dark reddish brown to grayish purple (5P 4/2), calcareous, moderately strong, no pirite.		
210									(209') MUDSTONE: medium gray (N5), very weak, very soft.		210
				Run 21			80/ 120	66	(210') CLAYSTONE: moderately reddish brown, calcareous, moderately strong.		
215									(213') Changing to claystone with many small limestone nodules, very calcareous, weak.		215
220											220

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Drilling Start Date:	**03/14/2016 13:00**	Boring Depth (ft):	**221**	Well Depth (ft):	**192**
Drilling End Date:	**03/16/2016 16:00**	Boring Diameter (in):	**6**	Well Diameter (in):	**2**
Drilling Company:	**Frontz Drilling**	Sampling Method(s):	**Sonic & Rock Core**	Screen Slot (in):	**0.010**
Drilling Method:	**Sonic**	DTW During Drilling (ft):		Riser Material:	**Sch 80 PVC**
Drilling Equipment:	**Versa-Sonic**	DTW After Drilling (ft):		Screen Material:	**Sch 80 PVC 4" Pre-packed**
Driller:	**Rob Hamilton**	Top of Casing Elev. (ft):	**731.39**	Seal Material(s):	**Bentonite Chips**
Logged By:	**Chad Gregory**	Location (X,Y):	**N 352,403.8 E 2,100,409.0**	Filter Pack:	**Sidley #5 & #7 (Choker Sand)**

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
220											220
									End of borehole at 221 ft bgs. Well installed on 03/23/2016		
225											225

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Drilling Start Date:	02/09/2016 12:45	Boring Depth (ft):	200	Well Depth (ft):	187
Drilling End Date:	02/12/2016 14:00	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	SPT & Rock Core	Screen Slot (in):	0.010
Drilling Method:	Air Rotary	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:		DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Aaron Mackey	Top of Casing Elev. (ft):	739.22	Seal Material(s):	Bentonite Chips
Logged By:	CC & CG	Location (X,Y):	N 353,180.4 E 2,095,686.6	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	Date & Time	Blow Counts	Recovery (in)	N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
0				SS		3 6 8 8	18/24		(0') TOPSOIL, light brown (10YR 4) with organic.		0
				SS		13 9 9 10	24/24		(1') Sandy SILT, medium firm, some sand lenses <1", dry, 7.5YR 6.		
				SS		4 6 7 9	21/24		(3') Silty/sandy CLAY, dry, stiff, yellowish brown (10YR 5/6).		
5				SS		12 12 13 12	24/24				5
				SS		3 7 8 10	24/24				
				SS		2 6 9 10	24/24		(10') Silty/sandy CLAY, grayish/yellow (10YR 6/3), dry, stiff.		
10											10
15											15
20									(19') CLAYSTONE: red/gray (10R 4/6), very decomposed, unable to core.		20

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Drilling Start Date:	02/09/2016 12:45	Boring Depth (ft):	200	Well Depth (ft):	187
Drilling End Date:	02/12/2016 14:00	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	SPT & Rock Core	Screen Slot (in):	0.010
Drilling Method:	Air Rotary	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:		DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Aaron Mackey	Top of Casing Elev. (ft):	739.22	Seal Material(s):	Bentonite Chips
Logged By:	CC & CG	Location (X,Y):	N 353,180.4 E 2,095,686.6	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
20											20
25									(25') Sandy SILTSTONE: light brown/yellow, very decomposed, unable to core.		25
									(27') CLAYSTONE with silt: red, less decomposed.		
30				Run 1			30/96	37	(32') SANDSTONE: fine grained, dry, light gray (N7), slightly decomposed, competent, moderately fractured.		30
35									(32.5') CLAYSTONE with silt: brown (5YR 4/4), moderately strong, limestone nodules near top, intensely fractured, competent.		35
40											40

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Drilling Start Date:	02/09/2016 12:45	Boring Depth (ft):	200	Well Depth (ft):	187
Drilling End Date:	02/12/2016 14:00	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	SPT & Rock Core	Screen Slot (in):	0.010
Drilling Method:	Air Rotary	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:		DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Aaron Mackey	Top of Casing Elev. (ft):	739.22	Seal Material(s):	Bentonite Chips
Logged By:	CC & CG	Location (X,Y):	N 353,180.4 E 2,095,686.6	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
40				Run 2			74/120	53	(40') CLAYSTONE with silt: greenish black (5GY 2/1), moderately strong, thickly bedded, slightly decomposed, intensely fractured.		40
									(43') LIMESTONE: gray (N5), strong, microcrystalline, thickly bedded, moderately decomposed, competent, moderately fractured.		
45											45
50				Run 3			5/120	100	Limestone grades into red beds at ~50.5'.		50
									(50.5') MUDSTONE/CLAYSTONE: reddish brown (5YR 3/2), highly decomposed, intensely fractured. [CLARKSBURGH RED BEDS]		
55											55
60											60

NOTES:

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Client: AEP-Gavin
Project: CHE8259A
Address: 7397 North State Route 7, Cheshire, OH

BORING LOG
Boring/Well No. 2016-09
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Drilling Start Date:	02/09/2016 12:45	Boring Depth (ft):	200	Well Depth (ft):	187
Drilling End Date:	02/12/2016 14:00	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	SPT & Rock Core	Screen Slot (in):	0.010
Drilling Method:	Air Rotary	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:		DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Aaron Mackey	Top of Casing Elev. (ft):	739.22	Seal Material(s):	Bentonite Chips
Logged By:	CC & CG	Location (X,Y):	N 353,180.4 E 2,095,686.6	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
60				Run 4			19/ 120	37	(60') MUDSTONE: reddish brown (5YR 3/2), lightly decomposed, intensely fractured. [CLARKSBURGH RED BEDS]		60
65											65
70				Run 5			92/ 120	73			70
75									(72.5') SANDSTONE: micaceous/pyritic, fine grained, medium light gray, thickly bedded, fresh, slightly fractured. [MORGANTOWN]		75
80											80

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Client: AEP-Gavin
Project: CHE8259A
Address: 7397 North State Route 7, Cheshire, OH

BORING LOG
Boring/Well No. 2016-09

Drilling Start Date:	02/09/2016 12:45	Boring Depth (ft):	200	Well Depth (ft):	187
Drilling End Date:	02/12/2016 14:00	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	SPT & Rock Core	Screen Slot (in):	0.010
Drilling Method:	Air Rotary	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:		DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Aaron Mackey	Top of Casing Elev. (ft):	739.22	Seal Material(s):	Bentonite Chips
Logged By:	CC & CG	Location (X,Y):	N 353,180.4 E 2,095,686.6	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
80				Run 6			103/ 120	67			80
									(81') Clayey MUDSTONE: reddish brown (5YR 3/2), weak, thickly bedded, highly decomposed, intensely fractured.		
85									(83.5') Silty SANDSTONE: micaceous, greenish gray (5G 6/1), cross-bedding at 85.5', thickly bedded, slightly decomposed, moderately disintegrated.		85
90				Run 7			76/ 120	58	(90') Silty/sandy SHALE: greenish gray (5G 6/1), moderately strong, fissile, moderately decomposed, intensely fractured.		90
									(92.5') MUDSTONE: dusky red (5R 2/2), weak to moderately strong, thickly bedded, highly decomposed, calcite veins, moderately disintegrated, moderately fractured.		
95											95
100											100

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BORING LOG
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Drilling Start Date:	02/09/2016 12:45	Boring Depth (ft):	200	Well Depth (ft):	187
Drilling End Date:	02/12/2016 14:00	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	SPT & Rock Core	Screen Slot (in):	0.010
Drilling Method:	Air Rotary	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:		DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Aaron Mackey	Top of Casing Elev. (ft):	739.22	Seal Material(s):	Bentonite Chips
Logged By:	CC & CG	Location (X,Y):	N 353,180.4 E 2,095,686.6	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
100				Run 8			58/ 120	16	(110') Repeating sequence of Silty MUDSTONE to SANDSTONE: micaceous, fine grained, 100-105' strong to moderately strong, slightly decomposed, slightly disintegrated, intensely fractured.		100
105											105
110				Run 9			100/ 120	89	(110') Shaly SILTSTONE: micaceous, moderately strong, thickly bedded, moderately decomposed, slightly disintegrated, slightly fractured.		110
115											115
120									(118.5') SILTSTONE: gray (N4), moderately strong, thickly bedded, moderately decomposed, slightly disintegrated, intensely fractured.		120

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Drilling Start Date:	02/09/2016 12:45	Boring Depth (ft):	200	Well Depth (ft):	187
Drilling End Date:	02/12/2016 14:00	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	SPT & Rock Core	Screen Slot (in):	0.010
Drilling Method:	Air Rotary	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:		DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Aaron Mackey	Top of Casing Elev. (ft):	739.22	Seal Material(s):	Bentonite Chips
Logged By:	CC & CG	Location (X,Y):	N 353,180.4 E 2,095,686.6	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
120				Run 10			41/ 120	22			120
125											125
130				Run 11			70/ 120	61	(130') MUDSTONE: red (5RP 2/2), moderately strong, thickly bedded.		130
135									(133') Silty CLAYSTONE: greenish gray, thickly bedded, moderately decomposed, slightly disintegrated, moderately to intensely fractured.		135
140											140

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Drilling Start Date:	02/09/2016 12:45	Boring Depth (ft):	200	Well Depth (ft):	187
Drilling End Date:	02/12/2016 14:00	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	SPT & Rock Core	Screen Slot (in):	0.010
Drilling Method:	Air Rotary	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:		DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Aaron Mackey	Top of Casing Elev. (ft):	739.22	Seal Material(s):	Bentonite Chips
Logged By:	CC & CG	Location (X,Y):	N 353,180.4 E 2,095,686.6	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
140				Run 12			96/ 120	63	(140') MUDSTONE/CLAYSTONE: red (5R 3/4) - matrix and olive (5Y 5/6) - secondary, moderately strong to strong.		140
145									(144') CLAYSHALE: greenish gray (5G 4/1), weak, moderately fissile, thickly bedded, moderately to highly decomposed, slightly disintegrated, slightly fractured.		145
150				Run 13			100/ 120	52	(151') Silty MUDSTONE: greenish gray (5G 4/1), with limestone nodules, thickly bedded, highly to moderately decomposed, moderately disintegrated, moderately fractured.		150
155									(158.5') Silty MUDSTONE: greenish gray (5G 4/1), thickly bedded, moderately decomposed, moderately disintegrated, moderately fractured,		155
160											160

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Drilling Start Date:	02/09/2016 12:45	Boring Depth (ft):	200	Well Depth (ft):	187
Drilling End Date:	02/12/2016 14:00	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	SPT & Rock Core	Screen Slot (in):	0.010
Drilling Method:	Air Rotary	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:		DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Aaron Mackey	Top of Casing Elev. (ft):	739.22	Seal Material(s):	Bentonite Chips
Logged By:	CC & CG	Location (X,Y):	N 353,180.4 E 2,095,686.6	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
160				Run 14			54/ 120	28	limestone nodules.		160
165											165
170				Run 15			48/ 120	92	(170') SILTSTONE: greenish gray (5G 4/1), not calcareous, thickly bedded, fresh to slightly decomposed, slightly fractured.		170
175									(171.5') Silty SANDSTONE: greenish gray (5G 4/1), fresh to slightly decomposed, moderately fractured, lightly micaceous.		175
180											180

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Client: AEP-Gavin
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Address: 7397 North State Route 7, Cheshire, OH

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Drilling Start Date:	02/09/2016 12:45	Boring Depth (ft):	200	Well Depth (ft):	187
Drilling End Date:	02/12/2016 14:00	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	SPT & Rock Core	Screen Slot (in):	0.010
Drilling Method:	Air Rotary	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:		DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Aaron Mackey	Top of Casing Elev. (ft):	739.22	Seal Material(s):	Bentonite Chips
Logged By:	CC & CG	Location (X,Y):	N 353,180.4 E 2,095,686.6	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
180				Run 16			102/ 120	29	(180') SANDSTONE: micaceous, fine grained, greenish gray (5G 4/1), thickly bedded, fresh to slightly decomposed, moderately disintegrated, moderately fractured, limestone nodules 180-183', cross-bedding 186-188.5'.		180
185											185
190				Run 17			114/ 120	62	(190') SANDSTONE: fine grained, micaceous, some beddings/bending, fresh to slightly decomposed, moderately disintegrated, moderately fractured.		190
195									(194.5') SANDSTONE: medium grained, light gray (N6), fresh to slightly decomposed, moderately disintegrated, moderately fractured.		195
200									(196.5') SILTSTONE: with limestone nodules, greenish gray (5G 4/1), slightly decomposed, moderately disintegrated, moderately fractured. Well installed on 03/03/2016 End of borehole at 200 ft bgs.		200

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Project: CHE8259A
Address: 7397 North State Route 7, Cheshire, OH

BORING LOG
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Drilling Start Date:	02/09/2016 15:50	Boring Depth (ft):	330	Well Depth (ft):	304.6
Drilling End Date:	02/17/2016 15:25	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	Sonic & Rock Core	Screen Slot (in):	0.010
Drilling Method:	Sonic	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:	Versa-Sonic	DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Rob Hamilton	Top of Casing Elev. (ft):	866.98	Seal Material(s):	Bentonite Chips
Logged By:	D. Mateas & M. Muenich	Location (X,Y):	N 351,060.5 E 2,096,240.3	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
0				RS-0-5			60/60		(0') Lean CLAY (CL); reddish brown (2.5YR 3/3), moist, low plasticity, trace fine gravel, little silt.		0
									(2.5') Clayey SILT (ML); reddish brown (10YR 7/4) with redox features, platy structure, friable, trace to few fine sand, dry, loose.		
5				RS-5-10			60/60		(5') Changes to yellowish brown (2.5Y 6/3).		5
									(6.5-7.5') Changes to reddish brown (2.5YR 4/4).		
									(7.5') Changes to light yellowish brown (2.5Y 6/4).		
10				RS-10-15			52/60		Trace cobbles from 5-10 ft.		10
									(10') Changes to yellowish brown (10YR 5/4), few fine to coarse gravel, trace cobbles, from 10-14' ft.		
15				RS-15-20			60/60		(14-14.5') SILT (ML); dense, trace to few red cobbles, light brownish gray (10YR 6/2) with some brownish yellow mottling (10YR 6/5), dry, platy, friable, trace fine sand.		15
20											20

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Client: AEP-Gavin
Project: CHE8259A
Address: 7397 North State Route 7, Cheshire, OH

BORING LOG
Boring/Well No. 2016-10

Drilling Start Date:	02/09/2016 15:50	Boring Depth (ft):	330	Well Depth (ft):	304.6
Drilling End Date:	02/17/2016 15:25	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	Sonic & Rock Core	Screen Slot (in):	0.010
Drilling Method:	Sonic	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:	Versa-Sonic	DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Rob Hamilton	Top of Casing Elev. (ft):	866.98	Seal Material(s):	Bentonite Chips
Logged By:	D. Mateas & M. Muenich	Location (X,Y):	N 351,068.1 E 2,096,227.1	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
20				RS-20-30			120/120		(20') SILT (ML); reddish brown (2.5YR 4/4), dry, friable, medium stiff, trace fine sand, weak platy structure.		20
									(22.5') Changes to light yellowish brown (10YR 6/4).		
25									(24.5') Changes to light reddish brown (2.5YR 7/3).		25
									(27.5') Changes to reddish brown (2.5YR 5/4).		
									(28.5') Changes to light gray (2.5Y 7/2) with few to little brownish yellow (10YR 6/3) mottled, very hard, dry, trace dark reddish brown (10YR 3/3) clay film.		
30				RS-30-39			103/103		(30') Changes to light gray (5Y 7/2), hard, weak, platy structure.		30
35									(37') Silty SHALE: strong, light gray (N7), planar (massive), slightly to moderately decomposed, competent.	Sampled with sonic core barrel, not boxed.	35
40											40

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Project: CHE8259A
Address: 7397 North State Route 7, Cheshire, OH

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Drilling Start Date:	02/09/2016 15:50	Boring Depth (ft):	330	Well Depth (ft):	304.6
Drilling End Date:	02/17/2016 15:25	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	Sonic & Rock Core	Screen Slot (in):	0.010
Drilling Method:	Sonic	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:	Versa-Sonic	DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Rob Hamilton	Top of Casing Elev. (ft):	866.98	Seal Material(s):	Bentonite Chips
Logged By:	D. Mateas & M. Muenich	Location (X,Y):	N 351,068.1 E 2,096,227.1	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
40				Run 1			10/30	22	(40') Sandy, silty SHALE: medium light gray (N6), strong, white (N9) laminations throughout, fresh to slightly decomposed, slightly disintegrated, moderately fractured, calcite veins at 41'.	02/11/2016 begin coring @ 09:45	40
				Run 2			118/ 120	62	(42.5') SANDSTONE: fine grained, strong, medium gray (N5) with medium dark gray (N4) laminations, micaceous, cross-bedded, slightly decomposed, slightly disintegrated, moderately fractured.		
45									(46-46.5') Moderately disintegrated.		45
									(47-48.5') Changes to moderate yellowish brown (10YR 5/4).		
									(48.5') Changes to medium gray (N5) with medium dark gray (N4) laminations, fresh, competent, unfractured.		
50									(51') Slightly decomposed, slightly disintegrated, moderately fractured.		50
				Run 3			119.5/ 120	73			
55									(58.4') Two converging fractures: 110° (extremely narrow) and 225° (narrow).		55
60									(58.5') Changes to dark yellowish orange (10YR		60

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Drilling Start Date:	02/09/2016 15:50	Boring Depth (ft):	330	Well Depth (ft):	304.6
Drilling End Date:	02/17/2016 15:25	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	Sonic & Rock Core	Screen Slot (in):	0.010
Drilling Method:	Sonic	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:	Versa-Sonic	DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Rob Hamilton	Top of Casing Elev. (ft):	866.98	Seal Material(s):	Bentonite Chips
Logged By:	D. Mateas & M. Muenich	Location (X,Y):	N 351,068.1 E 2,096,227.1	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
60									6/6) with moderate brown (5YR 4/4) laminations. (59.6-60.6') Medium gray (N5) with moderate dark gray (N4) laminations. (60.6') Dark yellowish orange (10YR 6/6) with moderate brown (5YR 4/4) laminations. (62.5') Changes to intensely fractured.		60
				Run 4			114.5/ 120	70	(63.2') SANDSTONE: micaceous, medium grained, strong, very light gray (N8), massive, fresh, competent, slightly fractured.		
65											65
									(68.3-69') Moderately wide fracture 80°, changes to coarse grained, weak, highly decomposed, iron oxide staining. (69') Changes to medium grained, light gray (N7) with reddish orange staining, strong, slightly decomposed, competent.		
70											70
				Run 5			115.5/ 120	81			
75									(74.5') Silty SANDSTONE: micaceous, strong, very light gray (N8) with medium dark gray (N4) laminations, cross-bedding, fine grained, slightly decomposed, slightly disintegrated, slightly fractured. (75-77.5') Dark yellowish orange (10YR 6/6) with moderate brown (5YR 4/4) cross bedding. (77.5') Changes back to gray found at 74.3'. (78.8-79') Mud inclusions, otherwise same as above.		75
80											80

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Drilling Start Date:	02/09/2016 15:50	Boring Depth (ft):	330	Well Depth (ft):	304.6
Drilling End Date:	02/17/2016 15:25	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	Sonic & Rock Core	Screen Slot (in):	0.010
Drilling Method:	Sonic	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:	Versa-Sonic	DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Rob Hamilton	Top of Casing Elev. (ft):	866.98	Seal Material(s):	Bentonite Chips
Logged By:	D. Mateas & M. Muenich	Location (X,Y):	N 351,068.1 E 2,096,227.1	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
80											80
				Run 6			115.5/ 120	83	(81.8-82.5') Moderately narrow fracture at 80°.		
85											85
									(86.4') SANDSTONE: fine grained, micaceous, very strong, medium gray (N5), massive, fresh, competent, unfractured.		
90											90
				Run 7			117/ 120	89			
95											95
									(97.5-98.3') Dark yellowish orange (10YR 6/6).		
100											100

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Address: 7397 North State Route 7, Cheshire, OH

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Drilling Start Date:	02/09/2016 15:50	Boring Depth (ft):	330	Well Depth (ft):	304.6
Drilling End Date:	02/17/2016 15:25	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	Sonic & Rock Core	Screen Slot (in):	0.010
Drilling Method:	Sonic	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:	Versa-Sonic	DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Rob Hamilton	Top of Casing Elev. (ft):	866.98	Seal Material(s):	Bentonite Chips
Logged By:	D. Mateas & M. Muenich	Location (X,Y):	N 351,068.1 E 2,096,227.1	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
100											100
				Run 8			98/ 120	27	(101.4') CLAYSTONE: very weak, dark gray (N3), massive, highly decomposed, very intensely fractured.		
									(102.5') Silty SHALE: weak, grayish black (N2), fissile, moderately to highly decomposed, slightly disintegrated, intensely fractured, slightly micaceous.		
105									(105') SANDSTONE: with interbedded silty shale, medium light gray (N6) and grayish black (N2), micaceous, moderately strong, laminations of shale, slightly to moderately decomposed, slightly disintegrated, intensely fractured.		105
									(108.9') Sandy SHALE: micaceous, moderately strong, medium dark gray (N4), slightly to moderately decomposed, moderately disintegrated, moderately to intensely fractured, fissile.		
110				Run 9			50/ 120	19	(112') Shaly SANDSTONE: micaceous, moderately strong, medium light gray (N6) and grayish black (N2), moderately to highly decomposed, moderately disintegrated, intensely fractured.		110
									(114.2') Sandy SHALE: micaceous, moderately strong, medium dark gray (N4), slightly to moderately decomposed, moderately disintegrated, moderately to intensely fractured.		
115									(116') COAL: moderately strong, black (N1), orange reddish staining, highly decomposed, very intensely fractured.		115
120											120

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Drilling Start Date:	02/09/2016 15:50	Boring Depth (ft):	330	Well Depth (ft):	304.6
Drilling End Date:	02/17/2016 15:25	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	Sonic & Rock Core	Screen Slot (in):	0.010
Drilling Method:	Sonic	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:	Versa-Sonic	DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Rob Hamilton	Top of Casing Elev. (ft):	866.98	Seal Material(s):	Bentonite Chips
Logged By:	D. Mateas & M. Muenich	Location (X,Y):	N 351,068.1 E 2,096,227.1	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
120				Run 10			120/ 120	35	(123') Silty SANDSTONE: micaceous, light gray (N7) with medium dark gray (N4) cross bedding and laminations, mud inclusions, strong, fine grained, slightly decomposed, slightly to moderately disintegrated, slightly to moderately fractured, mud infillings in fractures.		120
125									(128') Sandy CLAYSHALE: micaceous, strong, medium dark gray (N4), fine grained, fissile, slightly decomposed, moderately to intensely disintegrated, intensely fractured, coal inclusions.		125
130				Run 11			91/ 120	42	(130.9') Grades to claystone, highly decomposed, intensely disintegrated, very intensely fractured. (132-132.5') Grades to slightly decomposed, slightly disintegrated. (133') CLAYSHALE: moderately strong, grayish black (N2), fissile, slightly pyritic, slightly decomposed, intensely disintegrated, very intensely fractured.		130
135									(136') Clayey LIMESTONE: strong, medium gray (N5), massive, slightly decomposed, slightly disintegrated, unfractured.		135
140											140

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Drilling Start Date:	02/09/2016 15:50	Boring Depth (ft):	330	Well Depth (ft):	304.6
Drilling End Date:	02/17/2016 15:25	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	Sonic & Rock Core	Screen Slot (in):	0.010
Drilling Method:	Sonic	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:	Versa-Sonic	DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Rob Hamilton	Top of Casing Elev. (ft):	866.98	Seal Material(s):	Bentonite Chips
Logged By:	D. Mateas & M. Muenich	Location (X,Y):	N 351,068.1 E 2,096,227.1	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
140									(140') No Recovery.		140
				Run 12			47/ 120	10	(142.5') CLAYSTONE: strong, slightly calcareous, dark greenish gray (5G 4/1), micaceous, massive, moderately decomposed, moderately disintegrated, very intensely fractured.		
145									(145') Changes to moderately strong to weak, grayish red (10R 4/2) and dark reddish brown (10R 3/4), not calcareous, highly decomposed, highly disintegrated, intensely to very intensely fractured.		145
150				Run 13			80/ 120	51	(152.5') Grades to sandy silty claystone, grayish olive (10Y 4/2), not micaceous, chert nodules, moderately decomposed, moderately disintegrated, intensely fractured, clay infillings in fractures, slickensides.		150
155									(157.5') SILTSTONE to silty SANDSTONE: moderately strong, micaceous, medium dark gray (N4) with reddish orange staining, massive, slightly decomposed, slightly to moderately disintegrated, moderately fractured, fine grained, slickensides.		155
160											160

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Drilling Start Date:	02/09/2016 15:50	Boring Depth (ft):	330	Well Depth (ft):	304.6
Drilling End Date:	02/17/2016 15:25	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	Sonic & Rock Core	Screen Slot (in):	0.010
Drilling Method:	Sonic	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:	Versa-Sonic	DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Rob Hamilton	Top of Casing Elev. (ft):	866.98	Seal Material(s):	Bentonite Chips
Logged By:	D. Mateas & M. Muenich	Location (X,Y):	N 351,068.1 E 2,096,227.1	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
160											160
				Run 14			92/ 120	32	(162') Silty SANDSTONE: moderately strong to strong, micaceous, medium gray (N3), cross-bedded laminations, slightly decomposed, slightly disintegrated to competent, moderately fractured, fine grained.		
165									(163.7-166.5') Changes to medium dark gray (N4), laminations, no cross beddings, moderately decomposed, intensely disintegrated, intensely fractured.		165
									(166.5') CLAYSTONE: weak, dark reddish brown (10R 3/4) and grayish red (10R 4/2), massive to slightly fissile, moderately to highly decomposed, moderately disintegrated, intensely fractured.		
170									(170.6') SANDSTONE: moderately strong to weak, medium dark gray (N4), fine grained, micaceous, mostly massive, minor cross bedding, fresh to slightly decomposed, slightly disintegrated, slightly fractured.		170
				Run 15			90/90	51			
175									(174.3') Grades to Shaly SANDSTONE, moderately decomposed, moderately disintegrated, intensely fractured.		175
									(175.7') CLAYSHALE: strong, moderate brown (5YR 3/4), fissile, slightly decomposed, intensely disintegrated, intensely fractured.		
									(176.8') Shaly SANDSTONE: strong, medium dark gray (N4) and grayish black (N2), fissile, fine grained, slightly decomposed, slightly disintegrated, intensely fractured, slightly micaceous.		
180									(178.5') Changes to SANDSTONE: not fissile,		180

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Drilling End Date:	02/17/2016 15:25	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	Sonic & Rock Core	Screen Slot (in):	0.010
Drilling Method:	Sonic	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:	Versa-Sonic	DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Rob Hamilton	Top of Casing Elev. (ft):	866.98	Seal Material(s):	Bentonite Chips
Logged By:	D. Mateas & M. Muenich	Location (X,Y):	N 351,068.1 E 2,096,227.1	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
180									fresh and competent, slightly fractured.		180
				Run 16			49/60	53			
									(183') CLAYSHALE: strong, dusky brown (5YR 2/2), fissile, slightly decomposed, intensely disintegrated, intensely fractured.		
185											185
				Run 17			60/60	27	(187.5') CLAYSTONE: moderately strong to weak, dark reddish brown (10R 3/4), light olive brown (5Y 5/6), dusky yellow (5Y 6/4) and very dusky purple (5RP 2/2), highly decomposed, highly disintegrated, intensely to very intensely fractured, fractures at 45° and 135° angles, slickensides present. [CLARKSBURGH RED BEDS]		
190											190
				Run 18			32/60	7			
195											195
200											200

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Drilling Start Date:	**02/09/2016 15:50**	Boring Depth (ft):	**330**	Well Depth (ft):	**304.6**
Drilling End Date:	**02/17/2016 15:25**	Boring Diameter (in):	**6**	Well Diameter (in):	**2**
Drilling Company:	**Frontz Drilling**	Sampling Method(s):	**Sonic & Rock Core**	Screen Slot (in):	**0.010**
Drilling Method:	**Sonic**	DTW During Drilling (ft):		Riser Material:	**Sch 80 PVC**
Drilling Equipment:	**Versa-Sonic**	DTW After Drilling (ft):		Screen Material:	**Sch 80 PVC 4" Pre-packed**
Driller:	**Rob Hamilton**	Top of Casing Elev. (ft):	**866.98**	Seal Material(s):	**Bentonite Chips**
Logged By:	**D. Mateas & M. Muenich**	Location (X,Y):	**N 351,068.1 E 2,096,227.1**	Filter Pack:	**Sidley #5 & #7 (Choker Sand)**

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
200											200
				Run 19			35/ 120	0			
205											205
210											210
				Run 20			77/ 120	10	(212') Very dusky purple (5RP 2/2) and dusky yellow (5Y 6/4) grade out, grades to moderately decomposed, intensely fractured.		
215											215
220											220

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Drilling Start Date:	**02/09/2016 15:50**	Boring Depth (ft):	**330**	Well Depth (ft):	**304.6**
Drilling End Date:	**02/17/2016 15:25**	Boring Diameter (in):	**6**	Well Diameter (in):	**2**
Drilling Company:	**Frontz Drilling**	Sampling Method(s):	**Sonic & Rock Core**	Screen Slot (in):	**0.010**
Drilling Method:	**Sonic**	DTW During Drilling (ft):		Riser Material:	**Sch 80 PVC**
Drilling Equipment:	**Versa-Sonic**	DTW After Drilling (ft):		Screen Material:	**Sch 80 PVC 4" Pre-packed**
Driller:	**Rob Hamilton**	Top of Casing Elev. (ft):	**866.98**	Seal Material(s):	**Bentonite Chips**
Logged By:	**D. Mateas & M. Muenich**	Location (X,Y):	**N 351,068.1 E 2,096,227.1**	Filter Pack:	**Sidley #5 & #7 (Choker Sand)**

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS
220										
				Run 21			32.5/ 60	50	(221.5') Silty SANDSTONE: strong, medium bluish gray (5B 5/1), fine grained, massive, micaceous, fresh, competent, slightly fractured, calcareous nodules. [MORGANTOWN FRM]	
225									(225.5') CLAYSHALE: moderately strong, medium gray (N5), fissile, fresh to slightly decomposed, moderately disintegrated, intensely fractured, very micaceous, clay infillings in fractures, calcareous nodules. [MORGANTOWN FRM]	
				Run 22			22/24	0		Reamed hole with 6" sonic casing and set 6" PVC casing to 228 ft.
230				Run 23			88/ 120	38	(230') Shaly SANDSTONE: moderately strong, medium gray (N5), fissile, cross bedding, fresh, slightly disintegrated, moderately to intensely fractured, very micaceous. [MORGANTOWN FRM]	
235									(234.2') CLAYSHALE: weak, medium gray (N5) and dark greenish gray (5G 4/1), fissile, slightly decomposed, highly disintegrated, moderately to intensely fractured, pyritic, micaceous, 2" lenses of limestone at 234.1 and 235 ft. [MORGANTOWN FRM]	
									(236.5') CLAYSTONE: moderately strong to strong, dark reddish brown (10R 3/4), light olive brown (5Y 5/6) and very dusky purple (5RP 2/2), massive, moderately decomposed, slightly disintegrated, slightly to moderately fractured, calcareous nodules, slickensides. [MORGANTOWN FRM]	
240										

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Drilling Start Date:	**02/09/2016 15:50**	Boring Depth (ft):	**330**	Well Depth (ft):	**304.6**
Drilling End Date:	**02/17/2016 15:25**	Boring Diameter (in):	**6**	Well Diameter (in):	**2**
Drilling Company:	**Frontz Drilling**	Sampling Method(s):	**Sonic & Rock Core**	Screen Slot (in):	**0.010**
Drilling Method:	**Sonic**	DTW During Drilling (ft):		Riser Material:	**Sch 80 PVC**
Drilling Equipment:	**Versa-Sonic**	DTW After Drilling (ft):		Screen Material:	**Sch 80 PVC 4" Pre-packed**
Driller:	**Rob Hamilton**	Top of Casing Elev. (ft):	**866.98**	Seal Material(s):	**Bentonite Chips**
Logged By:	**D. Mateas & M. Muenich**	Location (X,Y):	**N 351,068.1 E 2,096,227.1**	Filter Pack:	**Sidley #5 & #7 (Choker Sand)**

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
240				Run 24			80/ 120	53			240
									(241.2') Sandy SILTSTONE: strong, dark greenish gray (5G 4/1) [silt] and light gray (N7) [sand], massive, mainly fissile, slightly decomposed, slightly disintegrated, slightly fractured, clay infillings in fractures, fine grained (sandy parts). [MORGANTOWN FRM]		
245											245
250				Run 25			115/ 120	79			250
									(252') SANDSTONE: strong, light gray (N7), fine grained, slightly micaceous, massive, fresh, competent, unfractured to slightly fractured. [MORGANTOWN FRM]		
255											255
									(256.3') Sandy silty SHALE: moderately strong, greenish gray (5G 6/1) and medium dark gray (N4), fissile, sand content grades out at 258 ft, slightly to highly decomposed, moderately disintegrated, pyritic, moderately fractured, clay infillings in fractures.		
260											260

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Drilling End Date:	02/17/2016 15:25	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	Sonic & Rock Core	Screen Slot (in):	0.010
Drilling Method:	Sonic	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:	Versa-Sonic	DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Rob Hamilton	Top of Casing Elev. (ft):	866.98	Seal Material(s):	Bentonite Chips
Logged By:	D. Mateas & M. Muenich	Location (X,Y):	N 351,068.1 E 2,096,227.1	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
260				Run 26			120/ 120	70	(262') Slickensides appear through rest of unit.		260
									(264') Grades to CLAYSTONE, slightly decomposed, slightly disintegrated, slightly fractured, with limestone nodules and lenses.		
265									(264.7') Pyrite grades out.		265
									(266.2') Changes to very dusky purple (5RP 2/2) with some light olive brown (5Y 5/6).		
									(267.2') Changes to dark greenish gray (5G 4/1).		
									(268') Changes to light olive brown (5Y 5/6) with some very dusky purple (5RP 2/2).		
									(269') Changes to highly decomposed, intensely fractured.		
270				Run 27			101.5/ 120	63	(271') Changes to slightly decomposed, slightly fractured.		270
									(272.6') Changes to dark greenish gray (5G 4/1) with light olive brown (5Y 5/6) secondary staining.		
275									(275.5-277.9') Changes to very dusky purple (5RP 2/2) and light olive brown (5Y 5/6).		275
									(277.9') Grades to limestone nodules and lenses, strong to very strong.		
280											280

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Drilling Start Date:	02/09/2016 15:50	Boring Depth (ft):	330	Well Depth (ft):	304.6
Drilling End Date:	02/17/2016 15:25	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	Sonic & Rock Core	Screen Slot (in):	0.010
Drilling Method:	Sonic	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:	Versa-Sonic	DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Rob Hamilton	Top of Casing Elev. (ft):	866.98	Seal Material(s):	Bentonite Chips
Logged By:	D. Mateas & M. Muenich	Location (X,Y):	N 351,068.1 E 2,096,227.1	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
280				Run 28			64/ 120	17	(282') Changes to very dusky purple (5RP 2/2) and light olive brown (5Y 5/6).		280
285									(285') Clayey LIMESTONE: strong to very strong, olive gray (5Y 4/1), microcrystalline, massive, with dark greenish gray (5G 4/1) secondary staining, slightly decomposed, slightly to moderately disintegrated, intensely to moderately fractured.		285
									(287.7') Shaly CLAYSTONE: moderately strong, medium dark gray (N4), slightly fissile, intensely fractured, chert lenses.		
290				Run 29			120/ 120	85	(291.2') SANDSTONE: strong, dark greenish gray (5G 4/1), calcareous with calcite nodules, fine grained, massive, fresh, competent, slightly fractured to unfractured, slightly micaceous. [COW RUN FRM]		290
295									(297-297.9') Changes to sandy shale with significant white limestone nodules.		295
300											300

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Drilling End Date:	02/17/2016 15:25	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	Sonic & Rock Core	Screen Slot (in):	0.010
Drilling Method:	Sonic	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:	Versa-Sonic	DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Rob Hamilton	Top of Casing Elev. (ft):	866.98	Seal Material(s):	Bentonite Chips
Logged By:	D. Mateas & M. Muenich	Location (X,Y):	N 351,068.1 E 2,096,227.1	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
300				Run 30			117/ 120	42	(300.2-302') Changes to Shaly SANDSTONE: fissile, intensely fractured.		300
305									(304.1') Sandy SHALE: moderately strong, dark greenish gray (5G 4/1), fine grained, fissile, large limestone nodules, slightly decomposed, slightly disintegrated, intensely to moderately fractured, clay infillings in fractures. [COW RUN FRM]		305
									(307.1') SANDSTONE: strong, dark greenish gray (5G 4/1), fine grained, massive, significant clay lenses, slightly decomposed, slightly disintegrated, moderately fractured.		
310				Run 31			120/ 120	74	(310.8') Clay lenses grade out, changes to fresh, competent and unfractured to slightly fractured, cross bedding. [COW RUN FRM]		310
315									(318.3') Changes to Shaly SANDSTONE: fissile, moderately disintegrated, intensely fractured.		315
320											320

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Drilling End Date:	02/17/2016 15:25	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	Sonic & Rock Core	Screen Slot (in):	0.010
Drilling Method:	Sonic	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:	Versa-Sonic	DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Rob Hamilton	Top of Casing Elev. (ft):	866.98	Seal Material(s):	Bentonite Chips
Logged By:	D. Mateas & M. Muenich	Location (X,Y):	N 351,068.1 E 2,096,227.1	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
320				Run 32			120/ 120	81	(319.7') CLAYSTONE: moderately strong, dark greenish gray (5G 4/1), massive, yellowish gray (5Y 8/1), limestone nodules, slightly decomposed, slightly disintegrated, slightly fractured.		320
325									(328.5') Grades to Sandy CLAYSTONE.		325
330									End of borehole at 330 ft bgs. Well installed on 03/04/2016		330
335											335

NOTES:

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Client: AEP-Gavin
Project: CHE8259A
Address: 7397 North State Route 7, Cheshire, OH

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Drilling Start Date:	**02/17/2016 17:15**	Boring Depth (ft):	**261**	Well Depth (ft):	**255**
Drilling End Date:	**02/20/2016 14:45**	Boring Diameter (in):	**6**	Well Diameter (in):	**2**
Drilling Company:	**Frontz Drilling**	Sampling Method(s):	**Rock Core**	Screen Slot (in):	**0.010**
Drilling Method:	**Sonic**	DTW During Drilling (ft):		Riser Material:	**Sch 80 PVC**
Drilling Equipment:	**Versa-Sonic**	DTW After Drilling (ft):		Screen Material:	**Sch 80 PVC 4" Pre-packed**
Driller:	**Rob Hamilton**	Top of Casing Elev. (ft):	**866.88**	Seal Material(s):	**Bentonite Chips**
Logged By:	**Doug Mateas**	Location (X,Y):	**N 351,060.5 E 2,096,240.3**	Filter Pack:	**Sidley #5 & #7 (Choker Sand)**

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
0									See log 2016-10 for 0-215 ft bgs.	4" rods dropped from 110-114 ft. See log for 2016-10. Blind drilled from 0-215 ft bgs. 6" PVC casing set from 0-219 ft bgs before geophysical analysis.	0
5											5
10											10
15											15
20											20

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Drilling Start Date:	**02/17/2016 17:15**	Boring Depth (ft):	**261**	Well Depth (ft):	**255**
Drilling End Date:	**02/20/2016 14:45**	Boring Diameter (in):	**6**	Well Diameter (in):	**2**
Drilling Company:	**Frontz Drilling**	Sampling Method(s):	**Rock Core**	Screen Slot (in):	**0.010**
Drilling Method:	**Sonic**	DTW During Drilling (ft):		Riser Material:	**Sch 80 PVC**
Drilling Equipment:	**Versa-Sonic**	DTW After Drilling (ft):		Screen Material:	**Sch 80 PVC 4" Pre-packed**
Driller:	**Rob Hamilton**	Top of Casing Elev. (ft):	**866.88**	Seal Material(s):	**Bentonite Chips**
Logged By:	**Doug Mateas**	Location (X,Y):	**N 351,060.5 E 2,096,240.3**	Filter Pack:	**Sidley #5 & #7 (Choker Sand)**

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
20									See log 2016-10 for 0-215 ft bgs.		20
25											25
30											30
35											35
40											40

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Drilling Start Date:	02/17/2016 17:15	Boring Depth (ft):	261	Well Depth (ft):	255
Drilling End Date:	02/20/2016 14:45	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	Rock Core	Screen Slot (in):	0.010
Drilling Method:	Sonic	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:	Versa-Sonic	DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Rob Hamilton	Top of Casing Elev. (ft):	866.88	Seal Material(s):	Bentonite Chips
Logged By:	Doug Mateas	Location (X,Y):	N 351,060.5 E 2,096,240.3	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
40									See log 2016-10 for 0-215 ft bgs.		40
45											45
50											50
55											55
60											60

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Drilling Start Date:	**02/17/2016 17:15**	Boring Depth (ft):	**261**	Well Depth (ft):	**255**
Drilling End Date:	**02/20/2016 14:45**	Boring Diameter (in):	**6**	Well Diameter (in):	**2**
Drilling Company:	**Frontz Drilling**	Sampling Method(s):	**Rock Core**	Screen Slot (in):	**0.010**
Drilling Method:	**Sonic**	DTW During Drilling (ft):		Riser Material:	**Sch 80 PVC**
Drilling Equipment:	**Versa-Sonic**	DTW After Drilling (ft):		Screen Material:	**Sch 80 PVC 4" Pre-packed**
Driller:	**Rob Hamilton**	Top of Casing Elev. (ft):	**866.88**	Seal Material(s):	**Bentonite Chips**
Logged By:	**Doug Mateas**	Location (X,Y):	**N 351,060.5 E 2,096,240.3**	Filter Pack:	**Sidley #5 & #7 (Choker Sand)**

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
60									See log 2016-10 for 0-215 ft bgs.		60
65											65
70											70
75											75
80											80

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Drilling Start Date:	**02/17/2016 17:15**	Boring Depth (ft):	**261**	Well Depth (ft):	**255**
Drilling End Date:	**02/20/2016 14:45**	Boring Diameter (in):	**6**	Well Diameter (in):	**2**
Drilling Company:	**Frontz Drilling**	Sampling Method(s):	**Rock Core**	Screen Slot (in):	**0.010**
Drilling Method:	**Sonic**	DTW During Drilling (ft):		Riser Material:	**Sch 80 PVC**
Drilling Equipment:	**Versa-Sonic**	DTW After Drilling (ft):		Screen Material:	**Sch 80 PVC 4" Pre-packed**
Driller:	**Rob Hamilton**	Top of Casing Elev. (ft):	**866.88**	Seal Material(s):	**Bentonite Chips**
Logged By:	**Doug Mateas**	Location (X,Y):	**N 351,060.5 E 2,096,240.3**	Filter Pack:	**Sidley #5 & #7 (Choker Sand)**

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
80									See log 2016-10 for 0-215 ft bgs.		80
85											85
90											90
95											95
100											100

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Drilling Start Date:	**02/17/2016 17:15**	Boring Depth (ft):	**261**	Well Depth (ft):	**255**
Drilling End Date:	**02/20/2016 14:45**	Boring Diameter (in):	**6**	Well Diameter (in):	**2**
Drilling Company:	**Frontz Drilling**	Sampling Method(s):	**Rock Core**	Screen Slot (in):	**0.010**
Drilling Method:	**Sonic**	DTW During Drilling (ft):		Riser Material:	**Sch 80 PVC**
Drilling Equipment:	**Versa-Sonic**	DTW After Drilling (ft):		Screen Material:	**Sch 80 PVC 4" Pre-packed**
Driller:	**Rob Hamilton**	Top of Casing Elev. (ft):	**866.88**	Seal Material(s):	**Bentonite Chips**
Logged By:	**Doug Mateas**	Location (X,Y):	**N 351,060.5 E 2,096,240.3**	Filter Pack:	**Sidley #5 & #7 (Choker Sand)**

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
100									See log 2016-10 for 0-215 ft bgs.		100
105											105
110											110
115											115
120											120

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Drilling Start Date:	02/17/2016 17:15	Boring Depth (ft):	261	Well Depth (ft):	255
Drilling End Date:	02/20/2016 14:45	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	Rock Core	Screen Slot (in):	0.010
Drilling Method:	Sonic	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:	Versa-Sonic	DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Rob Hamilton	Top of Casing Elev. (ft):	866.88	Seal Material(s):	Bentonite Chips
Logged By:	Doug Mateas	Location (X,Y):	N 351,060.5 E 2,096,240.3	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
120									See log 2016-10 for 0-215 ft bgs.		120
125											125
130											130
135											135
140											140

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Project: CHE8259A
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Drilling Start Date:	**02/17/2016 17:15**	Boring Depth (ft):	**261**	Well Depth (ft):	**255**
Drilling End Date:	**02/20/2016 14:45**	Boring Diameter (in):	**6**	Well Diameter (in):	**2**
Drilling Company:	**Frontz Drilling**	Sampling Method(s):	**Rock Core**	Screen Slot (in):	**0.010**
Drilling Method:	**Sonic**	DTW During Drilling (ft):		Riser Material:	**Sch 80 PVC**
Drilling Equipment:	**Versa-Sonic**	DTW After Drilling (ft):		Screen Material:	**Sch 80 PVC 4" Pre-packed**
Driller:	**Rob Hamilton**	Top of Casing Elev. (ft):	**866.88**	Seal Material(s):	**Bentonite Chips**
Logged By:	**Doug Mateas**	Location (X,Y):	**N 351,060.5 E 2,096,240.3**	Filter Pack:	**Sidley #5 & #7 (Choker Sand)**

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
140									See log 2016-10 for 0-215 ft bgs.		140
145											145
150											150
155											155
160											160

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Drilling Start Date:	**02/17/2016 17:15**	Boring Depth (ft):	**261**	Well Depth (ft):	**255**
Drilling End Date:	**02/20/2016 14:45**	Boring Diameter (in):	**6**	Well Diameter (in):	**2**
Drilling Company:	**Frontz Drilling**	Sampling Method(s):	**Rock Core**	Screen Slot (in):	**0.010**
Drilling Method:	**Sonic**	DTW During Drilling (ft):		Riser Material:	**Sch 80 PVC**
Drilling Equipment:	**Versa-Sonic**	DTW After Drilling (ft):		Screen Material:	**Sch 80 PVC 4" Pre-packed**
Driller:	**Rob Hamilton**	Top of Casing Elev. (ft):	**866.88**	Seal Material(s):	**Bentonite Chips**
Logged By:	**Doug Mateas**	Location (X,Y):	**N 351,060.5 E 2,096,240.3**	Filter Pack:	**Sidley #5 & #7 (Choker Sand)**

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
160									See log 2016-10 for 0-215 ft bgs.		160
165											165
170											170
175											175
180											180

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Drilling Start Date:	**02/17/2016 17:15**	Boring Depth (ft):	**261**	Well Depth (ft):	**255**
Drilling End Date:	**02/20/2016 14:45**	Boring Diameter (in):	**6**	Well Diameter (in):	**2**
Drilling Company:	**Frontz Drilling**	Sampling Method(s):	**Rock Core**	Screen Slot (in):	**0.010**
Drilling Method:	**Sonic**	DTW During Drilling (ft):		Riser Material:	**Sch 80 PVC**
Drilling Equipment:	**Versa-Sonic**	DTW After Drilling (ft):		Screen Material:	**Sch 80 PVC 4" Pre-packed**
Driller:	**Rob Hamilton**	Top of Casing Elev. (ft):	**866.88**	Seal Material(s):	**Bentonite Chips**
Logged By:	**Doug Mateas**	Location (X,Y):	**N 351,060.5 E 2,096,240.3**	Filter Pack:	**Sidley #5 & #7 (Choker Sand)**

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
180									See log 2016-10 for 0-215 ft bgs.		180
185											185
190											190
195											195
200											200

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Drilling Start Date:	**02/17/2016 17:15**	Boring Depth (ft):	**261**	Well Depth (ft):	**255**
Drilling End Date:	**02/20/2016 14:45**	Boring Diameter (in):	**6**	Well Diameter (in):	**2**
Drilling Company:	**Frontz Drilling**	Sampling Method(s):	**Rock Core**	Screen Slot (in):	**0.010**
Drilling Method:	**Sonic**	DTW During Drilling (ft):		Riser Material:	**Sch 80 PVC**
Drilling Equipment:	**Versa-Sonic**	DTW After Drilling (ft):		Screen Material:	**Sch 80 PVC 4" Pre-packed**
Driller:	**Rob Hamilton**	Top of Casing Elev. (ft):	**866.88**	Seal Material(s):	**Bentonite Chips**
Logged By:	**Doug Mateas**	Location (X,Y):	**N 351,060.5 E 2,096,240.3**	Filter Pack:	**Sidley #5 & #7 (Choker Sand)**

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
200									See log 2016-10 for 0-215 ft bgs.		200
205											205
210											210
215				Run 1			58/72	22.2	(215') CLAYSTONE: very weak to weak, dark reddish brown (10R 3/4) [primary color] with dusky yellow (5Y 6/4) and very dusky purple (5RP 2/2) [secondary colors], highly decomposed, intensely disintegrated, intensely to very intensely fractured, slickensides. [CLARKSBURGH RED BEDS]		215
220									(219') Silty SANDSTONE: strong, medium bluish gray (5G 5/1), fine grained, massive, micaceous,	6" of Split Spoon lost down hole.	220

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Drilling Start Date:	02/17/2016 17:15	Boring Depth (ft):	261	Well Depth (ft):	255
Drilling End Date:	02/20/2016 14:45	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	Rock Core	Screen Slot (in):	0.010
Drilling Method:	Sonic	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:	Versa-Sonic	DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Rob Hamilton	Top of Casing Elev. (ft):	866.88	Seal Material(s):	Bentonite Chips
Logged By:	Doug Mateas	Location (X,Y):	N 351,060.5 E 2,096,240.3	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
220									calcareous nodules, fresh, competent, slightly fractured. [MORGANTOWN FRM]		220
				Run 2			109/ 120	63.3	(221') Cross-bedding appears.		
225									(223.3') CLAYSHALE: dark reddish brown (10R 3/4) to greenish gray (5GY 6/1), moderately strong, fissile, slightly decomposed, moderately disintegrated, intensely fractured, micaceous and sandy to 223.8 ft, calcareous nodules, clay infillings in fractures. [MORGANTOWN FRM]		225
									(225.2') SANDSTONE to Shaly SANDSTONE: moderately strong to strong, medium bluish gray (5B 5/1), massive, fresh, competent to slightly disintegrated, unfractured to moderately fractured, very micaceous. [MORGANTOWN FRM]		
230									(228.8') Changes to Shaly SANDSTONE: cross-bedding, pyritic, clay infillings in fractures.		230
				Run 3			108/ 120	9.58	(231') Grades to very intensely fractured.		
235									(232.9') Sandy CLAYSHALE: weak to strong, medium bluish gray (5B 5/1) and medium dark gray (N4), fissile, fine grained, pyritic, micaceous, slightly decomposed, intensely disintegrated, intensely fractured, calcareous nodules. [MORGANTOWN FRM]		235
									(237.3') CLAYSTONE: moderately strong to strong, dark reddish brown (10R 3/4), light olive brown (5Y 5/6) and dusky purple (5RP 2/2), massive, slightly fissile at top, moderately decomposed, slightly disintegrated, moderately fractured, calcareous nodules, slickensides.		
240											240

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Drilling Start Date:	02/17/2016 17:15	Boring Depth (ft):	261	Well Depth (ft):	255
Drilling End Date:	02/20/2016 14:45	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	Rock Core	Screen Slot (in):	0.010
Drilling Method:	Sonic	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:	Versa-Sonic	DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Rob Hamilton	Top of Casing Elev. (ft):	866.88	Seal Material(s):	Bentonite Chips
Logged By:	Doug Mateas	Location (X,Y):	N 351,060.5 E 2,096,240.3	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
240				Run 4			61/ 120	49.2	[MORGANTOWN FRM]		240
									(242.2') Sandy SILTSTONE: strong, dark greenish gray (5G 4/1) [silt] and light gray (N7) [sand], massive, locally fissile, slightly decomposed, slightly disintegrated, slightly fractured, slickensides, pyritic. [MORGANTOWN FRM]		
245											245
250				Run 5			108/ 120	69.6			250
255									(253.6') SANDSTONE: strong, light gray (N7), fine grained, slightly silty, micaceous, massive, fresh, competent to slightly disintegrated, slightly fractured. [MORGANTOWN FRM]		255
									(258.1') Sandy silty SHALE: moderately strong, greenish gray (5G 6/1) and medium dark gray (N4), fissile, slightly decomposed, moderately disintegrated, moderately fractured, clay infillings		
260											260

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Drilling Start Date:	**02/17/2016 17:15**	Boring Depth (ft):	**261**	Well Depth (ft):	**255**
Drilling End Date:	**02/20/2016 14:45**	Boring Diameter (in):	**6**	Well Diameter (in):	**2**
Drilling Company:	**Frontz Drilling**	Sampling Method(s):	**Rock Core**	Screen Slot (in):	**0.010**
Drilling Method:	**Sonic**	DTW During Drilling (ft):		Riser Material:	**Sch 80 PVC**
Drilling Equipment:	**Versa-Sonic**	DTW After Drilling (ft):		Screen Material:	**Sch 80 PVC 4" Pre-packed**
Driller:	**Rob Hamilton**	Top of Casing Elev. (ft):	**866.88**	Seal Material(s):	**Bentonite Chips**
Logged By:	**Doug Mateas**	Location (X,Y):	**N 351,060.5 E 2,096,240.3**	Filter Pack:	**Sidley #5 & #7 (Choker Sand)**

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
260									in fractures, pyritic.		260
									End of borehole at 261 ft bgs. Well installed on 03/04/2016		
265											265

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BORING LOG

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Drilling Start Date:	02/18/2016 09:35	Boring Depth (ft):	150	Well Depth (ft):	112
Drilling End Date:	02/20/2016 12:30	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	Rock Core	Screen Slot (in):	0.010
Drilling Method:	Air Rotary	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:		DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Aaron Mackey	Top of Casing Elev. (ft):	773.89	Seal Material(s):	Bentonite Chips
Logged By:	C. Christensen	Location (X,Y):	N 355,633.4 E 2,095,228.4	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
0									(0') Overburden. Sandy Clay, wet.		0
5											5
10											10
15									(15') Clayey SHALE: dark gray, dry. (cuttings)		15
20											20

NOTES:

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Client: AEP-Gavin
Project: CHE8259A
Address: 7397 North State Route 7, Cheshire, OH

BORING LOG
Boring/Well No. 96153-R
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Drilling Start Date:	02/18/2016 09:35	Boring Depth (ft):	150	Well Depth (ft):	112
Drilling End Date:	02/20/2016 12:30	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	Rock Core	Screen Slot (in):	0.010
Drilling Method:	Air Rotary	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:		DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Aaron Mackey	Top of Casing Elev. (ft):	773.89	Seal Material(s):	Bentonite Chips
Logged By:	C. Christensen	Location (X,Y):	N 355,633.4 E 2,095,228.4	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
20											20
25											25
30											30
35											35
40											40

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Client: AEP-Gavin
Project: CHE8259A
Address: 7397 North State Route 7, Cheshire, OH

BORING LOG
Boring/Well No. 96153-R
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Drilling Start Date:	02/18/2016 09:35	Boring Depth (ft):	150	Well Depth (ft):	112
Drilling End Date:	02/20/2016 12:30	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	Rock Core	Screen Slot (in):	0.010
Drilling Method:	Air Rotary	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:		DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Aaron Mackey	Top of Casing Elev. (ft):	773.89	Seal Material(s):	Bentonite Chips
Logged By:	C. Christensen	Location (X,Y):	N 355,633.4 E 2,095,228.4	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
40									(40') Sandy SHALE: dark gray with some red bed.		40
45											45
50									(50') CLAYSTONE: red. (cuttings)		50
55											55
60											60

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Client: AEP-Gavin
Project: CHE8259A
Address: 7397 North State Route 7, Cheshire, OH

BORING LOG
Boring/Well No. 96153-R
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Drilling Start Date:	02/18/2016 09:35	Boring Depth (ft):	150	Well Depth (ft):	112
Drilling End Date:	02/20/2016 12:30	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	Rock Core	Screen Slot (in):	0.010
Drilling Method:	Air Rotary	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:		DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Aaron Mackey	Top of Casing Elev. (ft):	773.89	Seal Material(s):	Bentonite Chips
Logged By:	C. Christensen	Location (X,Y):	N 355,633.4 E 2,095,228.4	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
60											60
65											65
70											70
75											75
80											80

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Client: AEP-Gavin
Project: CHE8259A
Address: 7397 North State Route 7, Cheshire, OH

BORING LOG

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Drilling Start Date:	02/18/2016 09:35	Boring Depth (ft):	150	Well Depth (ft):	112
Drilling End Date:	02/20/2016 12:30	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	Rock Core	Screen Slot (in):	0.010
Drilling Method:	Air Rotary	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:		DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Aaron Mackey	Top of Casing Elev. (ft):	773.89	Seal Material(s):	Bentonite Chips
Logged By:	C. Christensen	Location (X,Y):	N 355,633.4 E 2,095,228.4	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
80											80
85											85
90				Run 1			72/120	46	(90') CLAYSTONE: dark reddish brown (10R 3/4) [primary] and light olive brown (5Y 5/6) [secondary], moderately strong to weak, thickly/massive bedding, slightly decomposed, moderately disintegrated, moderately to intensely fractured. [LOWER CLARKSBURGH RED BEDS]		90
95											95
100											100

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Client: AEP-Gavin
Project: CHE8259A
Address: 7397 North State Route 7, Cheshire, OH

BORING LOG

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Drilling Start Date:	02/18/2016 09:35	Boring Depth (ft):	150	Well Depth (ft):	112
Drilling End Date:	02/20/2016 12:30	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	Rock Core	Screen Slot (in):	0.010
Drilling Method:	Air Rotary	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:		DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Aaron Mackey	Top of Casing Elev. (ft):	773.89	Seal Material(s):	Bentonite Chips
Logged By:	C. Christensen	Location (X,Y):	N 355,633.4 E 2,095,228.4	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
100				Run 2			66/120	36	(100') SANDSTONE: pyritic, with calcite nodules, fine grained, dark greenish gray (5G 4/1). [MORGANTOWN]		100
									(103') Interbedded Silt/mud, dark reddish brown (10R 3/4) and dark greenish gray (5G 4/1).		
105									(104-105.5') Silty SANDSTONE: very pyritic, micaceous.		105
110				Run 3			90/120	81	(110') SANDSTONE: medium bluish gray (5B 5/1), calcareous, micaceous, fine to medium grained, strong, thickly bedded, fresh to slightly decomposed, competent, moderately fractured. [MORGANTOWN]		110
115									(115') Sandy SILTSTONE: pyritic, dark greenish gray (5G 4/1), strong to moderately strong, thickly bedded, slightly decomposed, slightly disintegrated, moderately to intensely fractured. [MORGANTOWN]		115
120											120

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Client: AEP-Gavin
Project: CHE8259A
Address: 7397 North State Route 7, Cheshire, OH

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Drilling Start Date:	02/18/2016 09:35	Boring Depth (ft):	150	Well Depth (ft):	112
Drilling End Date:	02/20/2016 12:30	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	Rock Core	Screen Slot (in):	0.010
Drilling Method:	Air Rotary	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:		DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Aaron Mackey	Top of Casing Elev. (ft):	773.89	Seal Material(s):	Bentonite Chips
Logged By:	C. Christensen	Location (X,Y):	N 355,633.4 E 2,095,228.4	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
120				Run 4			96/ 120	60	(120') Sandy MUDSHALE: dark reddish brown (10R 3/4), moderately strong, medium bedded, moderately to slightly decomposed, slightly disintegrated, intensely fractured, non calcareous. [MORGANTOWN]		120
									(122.5') Silty SANDSTONE: dark greenish gray (5G 4/1), micaceous, slightly calcareous, strong, thickly bedded, fresh to slightly decomposed, slightly disintegrated, moderately fractured. [MORGANTOWN]		
125											125
130				Run 5			108/ 120	78	(130') Silty SANDSTONE: some calcite nodules, strong, dark greenish gray (5G 4/1), thickly bedded, fresh to slightly decomposed, slightly disintegrated, moderately fractured, pyritic, micaceous. [MORGANTOWN]		130
									(133-134') Bands of sandy mudstone.		
135									(136-137.5') Intensely fractured.		135
									(137.5') SANDSTONE: medium grained, micaceous, gray (N5), strong. [MORGANTOWN]		
140											140

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Project: CHE8259A
Address: 7397 North State Route 7, Cheshire, OH

BORING LOG
Boring/Well No. 96153-R
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Drilling Start Date:	02/18/2016 09:35	Boring Depth (ft):	150	Well Depth (ft):	112
Drilling End Date:	02/20/2016 12:30	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	Rock Core	Screen Slot (in):	0.010
Drilling Method:	Air Rotary	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:		DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Aaron Mackey	Top of Casing Elev. (ft):	773.89	Seal Material(s):	Bentonite Chips
Logged By:	C. Christensen	Location (X,Y):	N 355,633.4 E 2,095,228.4	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
140				Run 6			93/ 120	54	(140') SANDSTONE: fine to medium grained, gray (N6), calcareous, strong, thickly bedded, fresh, competent to slightly disintegrated, moderately fractured.		140
									(142') LIMESTONE: dark greenish gray (5G 4/1), shaly, strong to moderately strong, thickly bedded, slightly to moderately disintegrated, moderately decomposed, intensely fractured.		
145											145
									(146') MUDSTONE/CLAYSHALE: dark reddish brown (10R 3/4) [primary] and light olive brown (5Y 5/6) [secondary], thickly bedded, moderately strong, moderately decomposed, moderately disintegrated, intensely to moderately fractured.		
150									End of borehole at 150 ft bgs. Well installed on 02/29/2016		150
155											155

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Project: CHE8259A
Address: 7397 North State Route 7, Cheshire, OH

BORING LOG
Boring/Well No. 96154-R
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Drilling Start Date:	02/15/2016 12:30	Boring Depth (ft):	125	Well Depth (ft):	96
Drilling End Date:	02/17/2016 14:50	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	Rock Core	Screen Slot (in):	0.010
Drilling Method:	Air Rotary	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:		DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Aaron Mackey	Top of Casing Elev. (ft):	738.22	Seal Material(s):	Bentonite Chips
Logged By:	C. Christensen	Location (X,Y):	N 353,185.4 E 2,095,695.2	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
0									Overburden.	Auger no SPT or logging.	0
5											5
10											10
15											15
20											20

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Client: AEP-Gavin
Project: CHE8259A
Address: 7397 North State Route 7, Cheshire, OH

BORING LOG

Boring/Well No. 96154-R
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Drilling Start Date:	02/15/2016 12:30	Boring Depth (ft):	125	Well Depth (ft):	96
Drilling End Date:	02/17/2016 14:50	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	Rock Core	Screen Slot (in):	0.010
Drilling Method:	Air Rotary	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:		DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Aaron Mackey	Top of Casing Elev. (ft):	738.22	Seal Material(s):	Bentonite Chips
Logged By:	C. Christensen	Location (X,Y):	N 353,185.4 E 2,095,695.2	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
20											20
									(22.5') Mudstone/decomposed sandstone.		
25											25
30											30
35											35
40											40

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Project: CHE8259A
Address: 7397 North State Route 7, Cheshire, OH

BORING LOG
Boring/Well No. 96154-R
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Drilling Start Date:	02/15/2016 12:30	Boring Depth (ft):	125	Well Depth (ft):	96
Drilling End Date:	02/17/2016 14:50	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	Rock Core	Screen Slot (in):	0.010
Drilling Method:	Air Rotary	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:		DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Aaron Mackey	Top of Casing Elev. (ft):	738.22	Seal Material(s):	Bentonite Chips
Logged By:	C. Christensen	Location (X,Y):	N 353,185.4 E 2,095,695.2	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
40											40
45											45
50											50
55											55
60											60

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Project: CHE8259A
Address: 7397 North State Route 7, Cheshire, OH

BORING LOG

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Drilling Start Date:	02/15/2016 12:30	Boring Depth (ft):	125	Well Depth (ft):	96
Drilling End Date:	02/17/2016 14:50	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	Rock Core	Screen Slot (in):	0.010
Drilling Method:	Air Rotary	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:		DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Aaron Mackey	Top of Casing Elev. (ft):	738.22	Seal Material(s):	Bentonite Chips
Logged By:	C. Christensen	Location (X,Y):	N 353,185.4 E 2,095,695.2	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
60											60
65				Run 1			48/ 120	50	(65') MUDSTONE [CLARKSBURGH RED BEDS]		65
									(67.5') Silty MUDSTONE [CLARKSBURGH RED BEDS]		
70											70
75				Run 2			112/ 120	70	(75') SANDSTONE: medium bluish gray (5B 5/1), calcareous, micaceous, pyritic, calcite nodules near 80', strong, thickly bedded, fresh to slightly decomposed, slightly disintegrated, slightly fractured. [MORGANTOWN]		75
80											80

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Project: CHE8259A
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BORING LOG
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Drilling Start Date:	02/15/2016 12:30	Boring Depth (ft):	125	Well Depth (ft):	96
Drilling End Date:	02/17/2016 14:50	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	Rock Core	Screen Slot (in):	0.010
Drilling Method:	Air Rotary	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:		DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Aaron Mackey	Top of Casing Elev. (ft):	738.22	Seal Material(s):	Bentonite Chips
Logged By:	C. Christensen	Location (X,Y):	N 353,185.4 E 2,095,695.2	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
80									(80') Shaly MUDSTONE: dusky red (5R 4/2), slightly calcareous with sand lenses, moderately strong to weak, thickly bedded, moderately decomposed, moderately disintegrated, moderately fractured.		80
85				Run 3			80/120	7	(84') SANDSTONE: pyritic, fine grained, medium bluish gray (5B 5/1), strong, medium thick bedded, slightly decomposed, not calcareous, slightly disintegrated, moderately to intensely fractured. [MORGANTOWN]		85
90									(85') SANDSTONE: pyritic, micaceous, fine to medium grained, medium bluish gray (5B 5/1), strong, medium/thick bedded, slightly decomposed, slightly disintegrated, intensely fractured. Medium grained Sandstone for 85-97' (very fractured). Then alternating bands of sandy siltstone and sandstone, cross bedding near top.		90
95				Run 4			96/120	84	(95') MUDSTONE: dusky red (5R 4/2), with sandy inclusions, moderately strong, thickly bedded, slightly decomposed, moderately disintegrated, moderately fractured.		95
100									(97.5') Sandy SILTSTONE: dark greenish gray (5G 4/1), some sandstone lenses, moderately strong, medium bedded, fresh to slightly decomposed, slightly to moderately disintegrated, slightly fractured.		100

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BORING LOG
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Drilling Start Date:	02/15/2016 12:30	Boring Depth (ft):	125	Well Depth (ft):	96
Drilling End Date:	02/17/2016 14:50	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	Rock Core	Screen Slot (in):	0.010
Drilling Method:	Air Rotary	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:		DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Aaron Mackey	Top of Casing Elev. (ft):	738.22	Seal Material(s):	Bentonite Chips
Logged By:	C. Christensen	Location (X,Y):	N 353,185.4 E 2,095,695.2	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
100											100
									(101.5') SANDSTONE: micaceous, fine grained, gray (N8/N4) bedding, thinly bedded, strong, fresh, slightly fractured.		
105				Run 5			84/ 120	64	(105') Alternating SANDSTONE and SILTSTONE: micaceous, bedded, calcareous, fine grained, fresh, slightly disintegrated, moderately fractured.		105
110											110
115				Run 6			102/ 120	52	(115') Sandy SILTSTONE: pyritic, micaceous (light), dark greenish gray (5G 4/1), some calcite nodules, moderately strong, thickly bedded, slightly decomposed, moderately disintegrated, intensely fractured.		115
									(118') Shaly SILTSTONE: with calcite nodules, dark greenish gray (5G 4/1), moderately strong, thickly bedded, moderately decomposed, moderately fractured, moderately disintegrated.		
120											120

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Client: AEP-Gavin
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BORING LOG

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Drilling Start Date:	02/15/2016 12:30	Boring Depth (ft):	125	Well Depth (ft):	96
Drilling End Date:	02/17/2016 14:50	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	Frontz Drilling	Sampling Method(s):	Rock Core	Screen Slot (in):	0.010
Drilling Method:	Air Rotary	DTW During Drilling (ft):		Riser Material:	Sch 80 PVC
Drilling Equipment:		DTW After Drilling (ft):		Screen Material:	Sch 80 PVC 4" Pre-packed
Driller:	Aaron Mackey	Top of Casing Elev. (ft):	738.22	Seal Material(s):	Bentonite Chips
Logged By:	C. Christensen	Location (X,Y):	N 353,185.4 E 2,095,695.2	Filter Pack:	Sidley #5 & #7 (Choker Sand)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
120											120
									(122') LIMESTONE: gray (N4), with calcareous nodules, strong, thickly bedded, slightly decomposed, moderately disintegrated, moderately fractured.		
125									End of borehole at 125 ft bgs. Well installed on 03/03/2016		125
130											130

NOTES:

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

MONITORING WELL CONSTRUCTION

JOB NUMBER _____

COMPANY **OHIO POWER COMPANY**

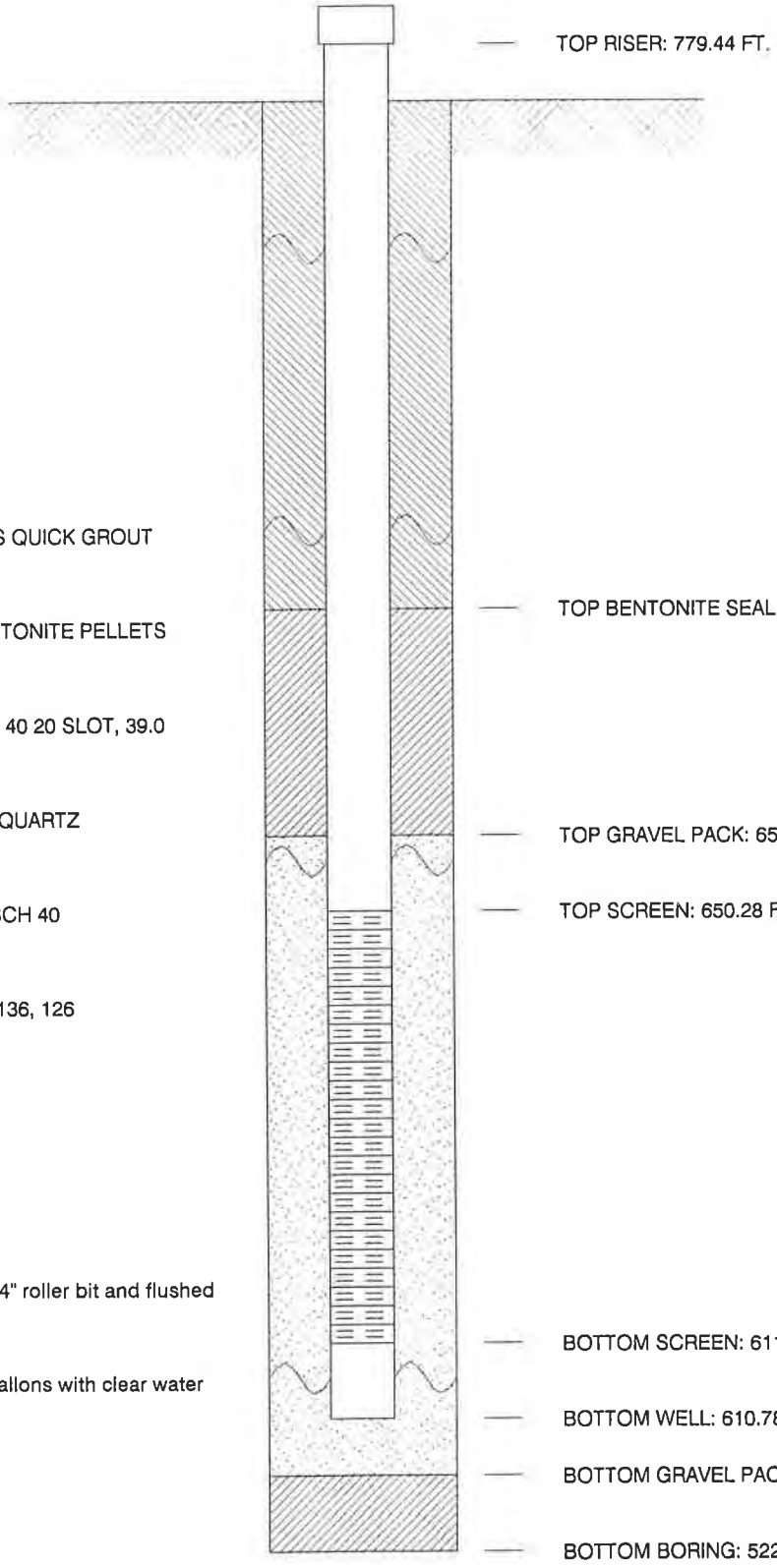
WELL No. **96152** BORING No. **96152** INSTALLED **06/27/96**

PROJECT **GAVIN PLANT FLY ASH POND CLOSURE**

OORDINATES **N 355,372.6 E 2,065,722.5**

SYSTEM **STATE PLANE**

GROUND ELEVATION 777.28 FT.



GROUT SEAL: 300 GALLONS QUICK GROUT

BENTONITE SEAL: 75# BENTONITE PELLETS

SCREEN: 2.0 DIA., PVC SCH 40 20 SLOT, 39.0

GRAVEL PACK: 700# NO. 4 QUARTZ

RISER PIPE: 2.0, DIA., PVC SCH 40

SPACERS, DPTH: 166, 146, 136, 126

Boring was drilled using 53/4" roller bit and flushed with mud.

Hole was flushed with 500 gallons with clear water prior to

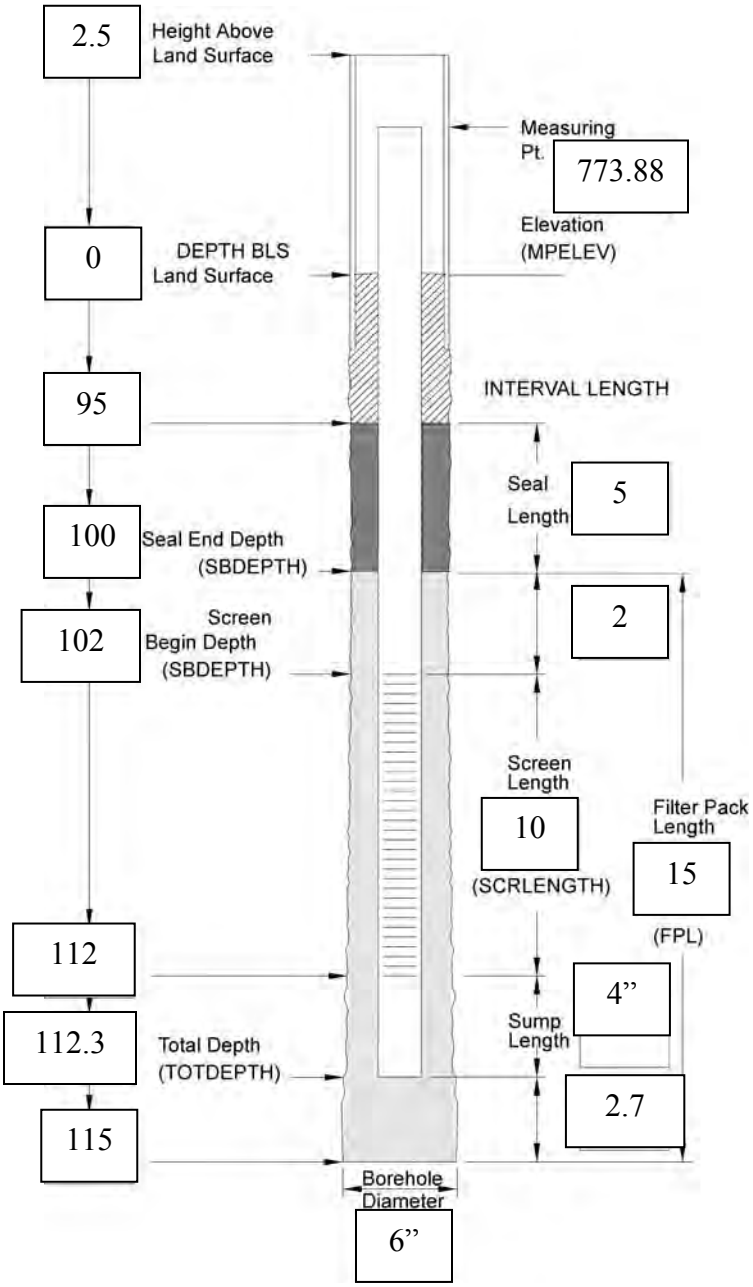
installing well.

Geosyntec consultants

WELL CONSTRUCTION LOG
ABOVE GROUND COMPLETION

Well I.D. (LOCID): 96153R
Drilling Company: Frontz Drilling
Drillers: Aaron Mackey
Geologist/Engineer: Chad Gregory
Signature: _____

Site: AEP – Gavin Project Number: CHE8259A
Installation Method: Air Rotary
Casing Installation Date (INSDATE): 2/29/16
Well Type (WTCCODE): Monitoring Well
Well Completion Method (WCMCODE): _____
Geologic Completion Zone (GZCODE): _____



Comments
Original borehole 150'. Backfilled w/ Bentonite chips to 115'.

Well Completion
Guard Posts (Y / N) Date: _____
Surface Pad Size: _____ ft x _____ ft
Protective Casing or Cover
Diameter/Type: 6" Steel, 5' length
Depth BGS: _____ Weep Hole (Y / N)
Grout
Composition/Proportions: 150 gal
7 gal water: 94 lbs portland cement: 4 lbs bentonite grout
Placement Method: Pressure Tremie

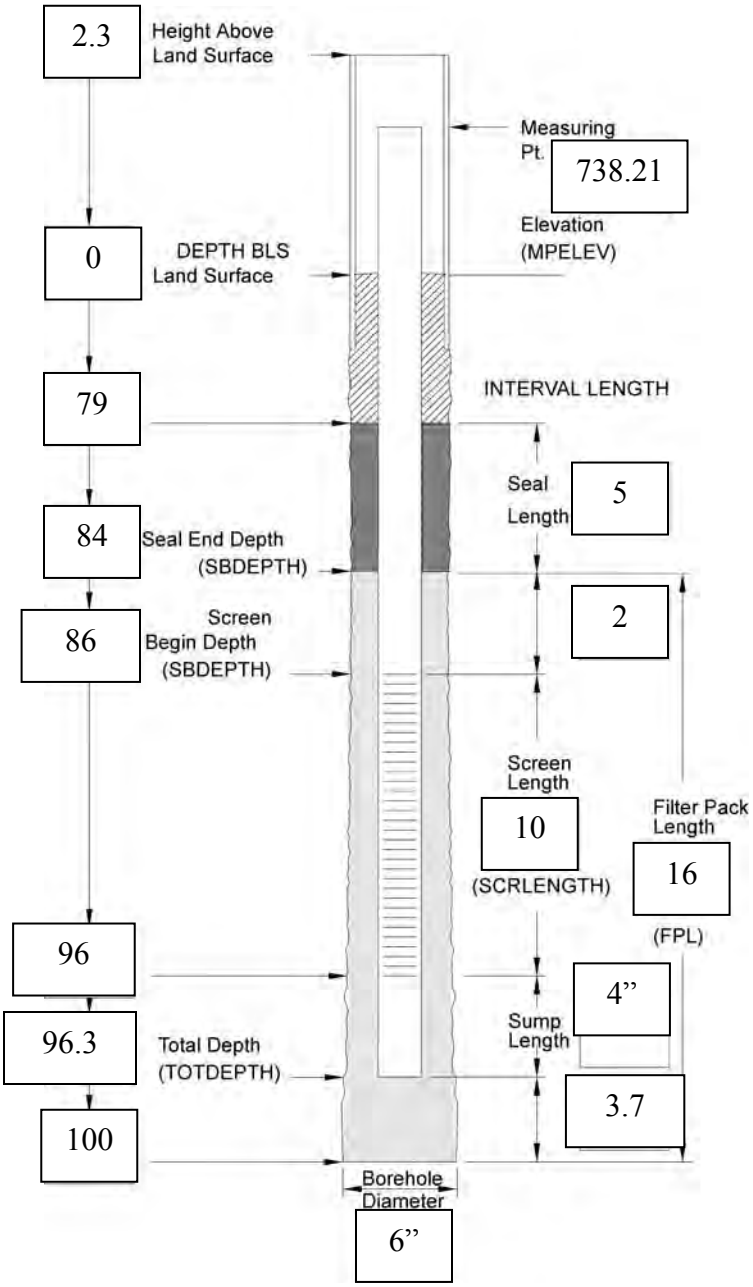
Seal Date: 2/29/16
Type: 3/8" med, crushed bentonite chips
Source: Baroid – Wyoming Sodium Bentonite (2 bags)
Set-up/Hydration Time: 2 hours
Placement Method: Poured, Gravity
Vol. Fluid Added: N/A, submerged
Filter Pack
Type: Sidley #5 & #7 above screen (Choker Sand)
Source: Sidley
Amount Used: 3 – 50 lb bags #5, 0.5 – 50 lb bag #7
Placement Method: Poured Gravity
Well Riser Pipe
Casing Material (CMACODE): Sch. 80 PVC
Casing Inside Diameters (CASDIAM): 2.0 in.
Screen
Material: Sch. 80 PVC 4" pre-packed
Inside Diameter (SCRDIAM): 2.0 in.
Screen Slot Size: (SOUA): 0.01 (10-Slot) in.
Percent Open Area (PCTOPEN): _____
Sump or Bottom Cap (Y) N)
Type/Length: Sch. 80 PVC 2"
Backfill Plug (Y) N)
Material: Bentonite chips (8 - 50 lb bags)
Placement Method: Poured, Gravity
Set-up/Hydration Time: N/A
Total Water Volume During Construction
Introduced (Gal): - Recovered _____ (Gal): -
Reviewed By: J. Couch Date: 4/13/016

Geosyntec consultants

WELL CONSTRUCTION LOG
ABOVE GROUND COMPLETION

Well I.D. (LOCID): 96154R
Drilling Company: Frontz Drilling
Drillers: Aaron Mackey
Geologist/Engineer: Chad Gregory
Signature: _____

Site: AEP – Gavin Project Number: CHE8259A
Installation Method: Air Rotary
Casing Installation Date (INSDATE): 3/3/16
Well Type (WTCCODE): Monitoring Well
Well Completion Method (WCMCODE): _____
Geologic Completion Zone (GZCODE): _____



Comments
Original borehole 125'. Backfilled w/ Bentonite chips to 100'. 70' of 6" PVC surface casing left in hole, (10' to 80' bgs)

Well Completion
Guard Posts (Y / N) Date: _____
Surface Pad Size: _____ ft x _____ ft
Protective Casing or Cover
Diameter/Type: 6" Steel, 5' length
Depth BGS: _____ Weep Hole (Y / N)
Grout
Composition/Proportions: 150 gal
7 gal water: 94 lbs portland cement: 4 lbs bentonite grout
Placement Method: Pressure Tremie

Seal Date: 3/2/16
Type: 3/8" med, crushed bentonite chips
Source: Baroid – Wyoming Sodium Bentonite (1 bag)
Set-up/Hydration Time: >12 hours
Placement Method: Poured, Gravity
Vol. Fluid Added: 5 Gallons
Filter Pack
Type: Sidley #5 & #7 above screen (Choker Sand)
Source: Sidley
Amount Used: 4.5 – 50 lb bags #5, 0.5 – 50 lb bag #7
Placement Method: Poured Gravity
Well Riser Pipe
Casing Material (CMACODE): Sch. 80 PVC
Casing Inside Diameters (CASDIAM): 2.0 in.
Screen
Material: Sch. 80 PVC 4" pre-packed
Inside Diameter (SCRDIAM): 2.0 in.
Screen Slot Size: (SOUA): 0.01 (10-Slot) in.
Percent Open Area (PCTOPEN): _____
Sump or Bottom Cap (Y) N)
Type/Length: Sch. 80 PVC 2"
Backfill Plug (Y) N)
Material: Bentonite chips (5 - 50 lb bags)
Placement Method: Poured, Gravity
Set-up/Hydration Time: N/A
Total Water Volume During Construction
Introduced (Gal): - Recovered (Gal): -
Reviewed By: J. Couch Date: 4/13/2016

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

GEOMON CONSTRUCTION

JOB NUMBER

COMPANY **OHIO POWER COMPANY**

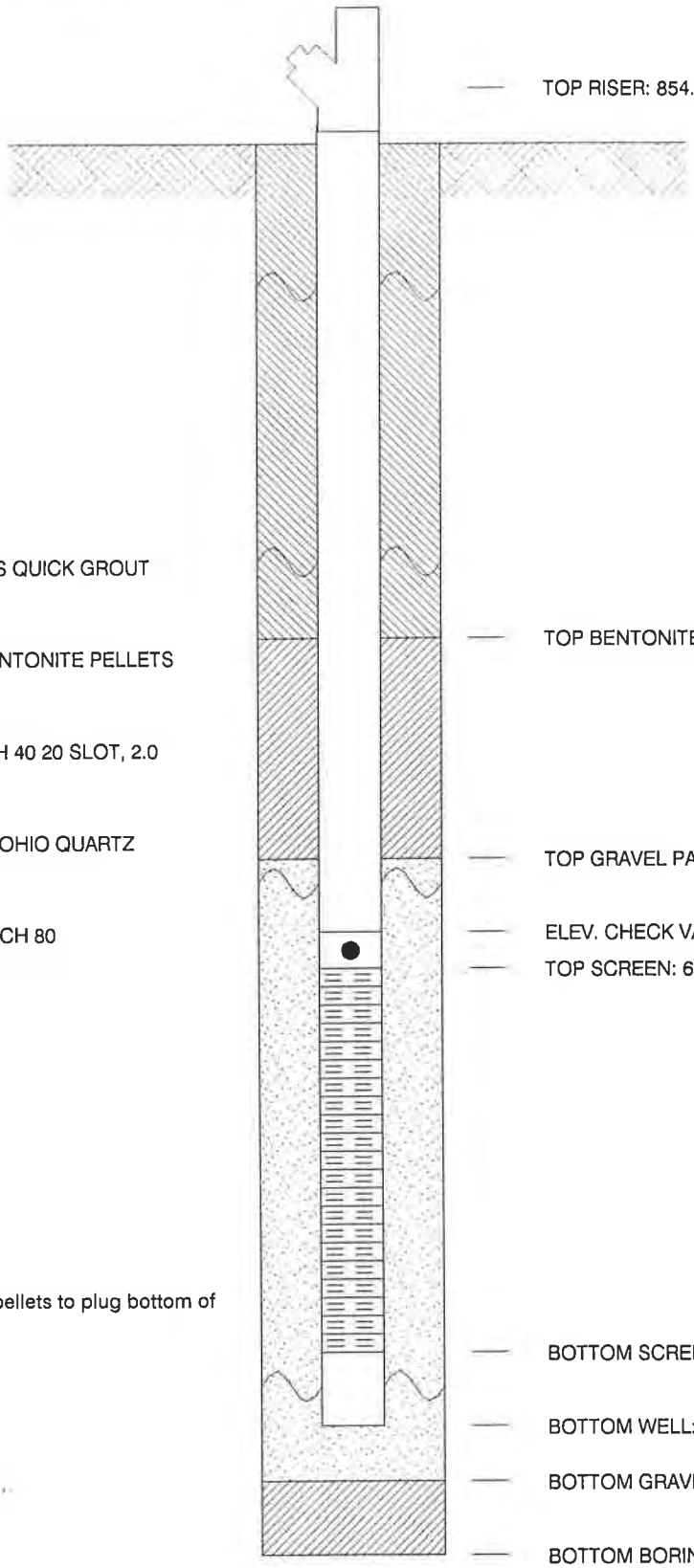
WELL No. **96156** BORING No. **96156** INSTALLED **01/11/96**

PROJECT **GAVIN PLANT FLY ASH POND CLOSURE**

COORDINATES **N 352,338.7 E 2,061,912.6**

SYSTEM **STATE PLANE**

GROUND ELEVATION 851.81 FT.



TOP RISER: 854.20 FT.

TOP BENTONITE SEAL: 680.81 FT.

TOP GRAVEL PACK: 676.31 FT.

ELEV. CHECK VALVE: 632.21 FT.

TOP SCREEN: 631.71 FT.

BOTTOM SCREEN: 629.71 FT.

BOTTOM WELL: 629.31 FT.

BOTTOM GRAVEL PACK: 627.81 FT.

BOTTOM BORING: 488.01 FT.

GROUT SEAL: 100 GALLONS QUICK GROUT

BENTONITE SEAL: 450# BENTONITE PELLETS

SCREEN: 1.25 dia., PVC SCH 40 20 SLOT, 2.0

GRAVEL PACK: 100# NO. 4 OHIO QUARTZ

RISER PIPE: 1.0, dia., PVC SCH 80

SPACERS, dpth: n\a

Tremied 450# of bentonite pellets to plug bottom of hole.

SWL at installation 76.3.

Brass weight on 3/16 tubing.

AMERICAN ELECTRIC POWER SERVICE CORPORATION

AEP CIVIL ENGINEERING LABORATORY

MONITORING WELL CONSTRUCTION

JOB NUMBER _____

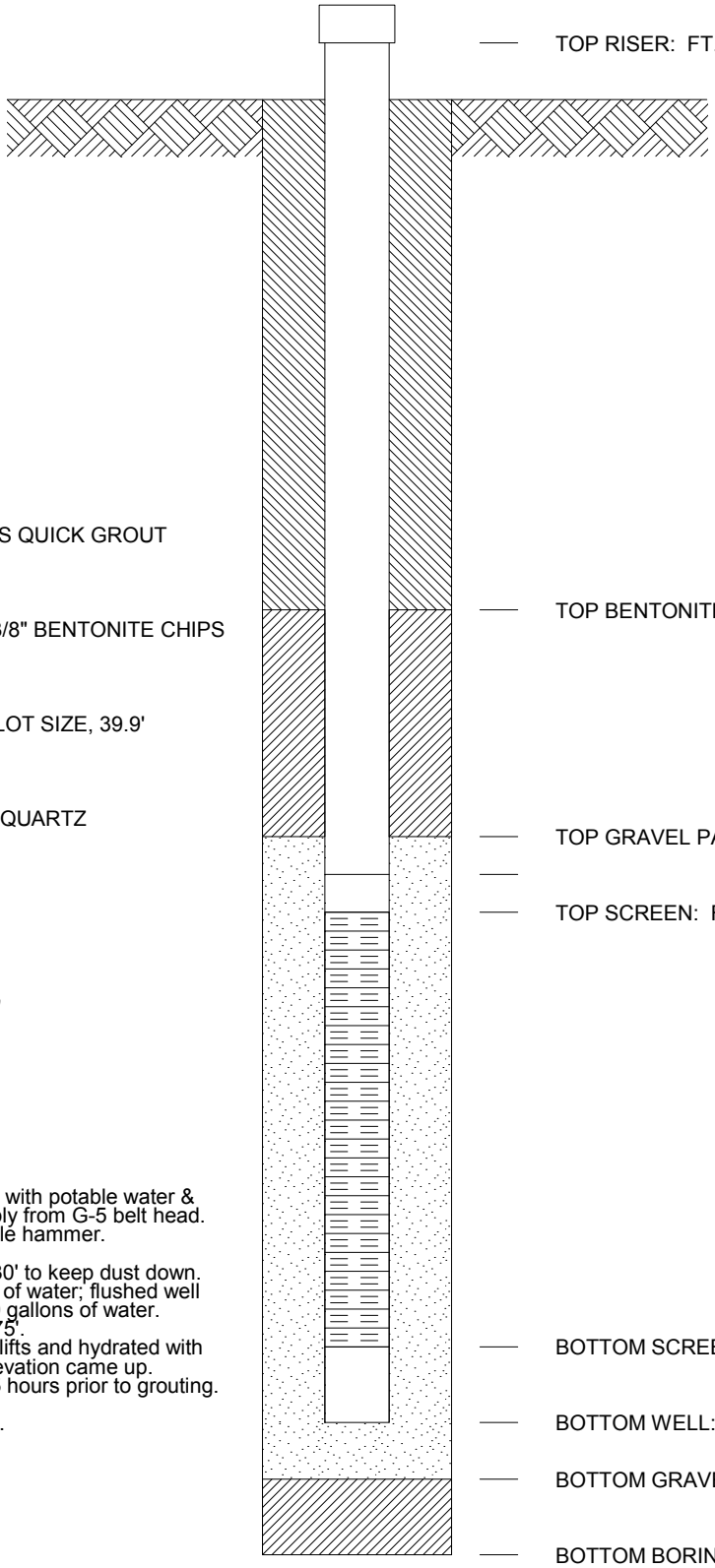
COMPANY _____ WELL No. **9910** BORING No. **9910** INSTALLED _____

PROJECT **GAVIN FLY ASH POND CLOSURE**

COORDINATES _____

SYSTEM _____

GROUND ELEVATION FT.



TOP RISER: FT.

TOP BENTONITE SEAL: FT.

TOP GRAVEL PACK: FT.

TOP SCREEN: FT.

BOTTOM SCREEN: FT.

BOTTOM WELL: FT.

BOTTOM GRAVEL PACK: FT.

BOTTOM BORING: FT.

GROUT SEAL: 120 GALLONS QUICK GROUT

BENTONITE SEAL: 150 lbs 3/8" BENTONITE CHIPS

SCREEN: 2" dia., PVC; 20 SLOT SIZE, 39.9'

GRAVEL PACK: 1700 lbs #4 QUARTZ

RISER PIPE: 2", dia., PVC

SPACERS, DEPTH: 85' & 75'

Notes: Decon all tools and rig with potable water & alconox mix. Water supply from G-5 belt head.
Boring drilled with 8" down hole hammer.

1. Used water injection after 30' to keep dust down.
2. Used approx. 2000 gallons of water; flushed well with approx. 750 to 1000 gallons of water.
3. Spider spacers at 85' and 75'.
4. Bentonite seal placed in 1' lifts and hydrated with potable water as seal elevation came up.
5. Seal allowed to hydrate 1.5 hours prior to grouting.

SWL at 97.8' after installation.

GEOMCNST GAVIN_FLY_ASH_POND.GPJ AEP.GDT 3/7/12

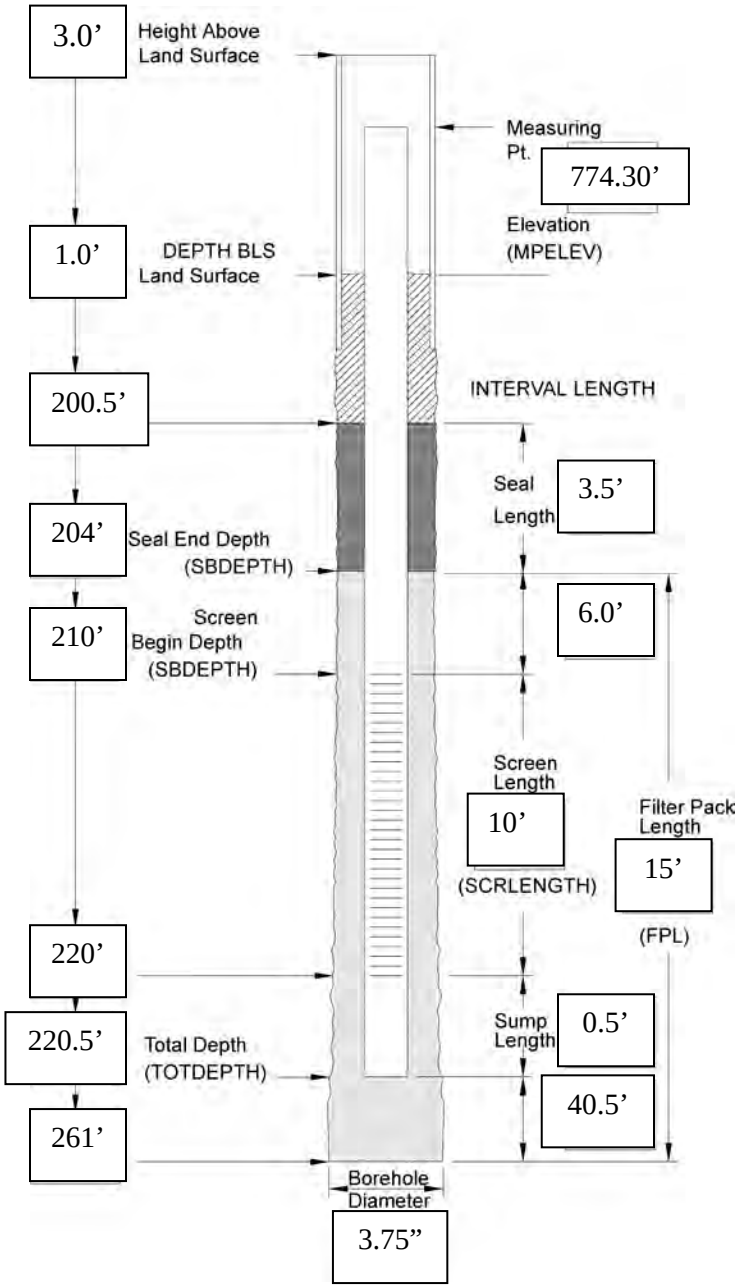
Geosyntec consultants
engineers | scientists | innovators

PROJECT # CHE8273

WELL CONSTRUCTION LOG
ABOVE GROUND COMPLETION

Well I.D. (LOCID): MW-20
Drilling Company: Frontz Drilling Company
Drillers: D. Schrecengost/R. VanDyne
Geologist/Engineer: J. Bannantine
Signature: _____

Site: AEP Gavin FAR Closure
Installation Method: Sonic – Rock Coring
Casing Installation Date (INSDATE): 05/08/2012
Well Type (WTCCODE): Monitoring
Well Completion Method (WCMCODE): _____
Geologic Completion Zone (GZCODE): ___



Comments
Pre-packed, 20-slot screen.
Borehole cored and logged from 0-261 ft. bgs prior to well construction.

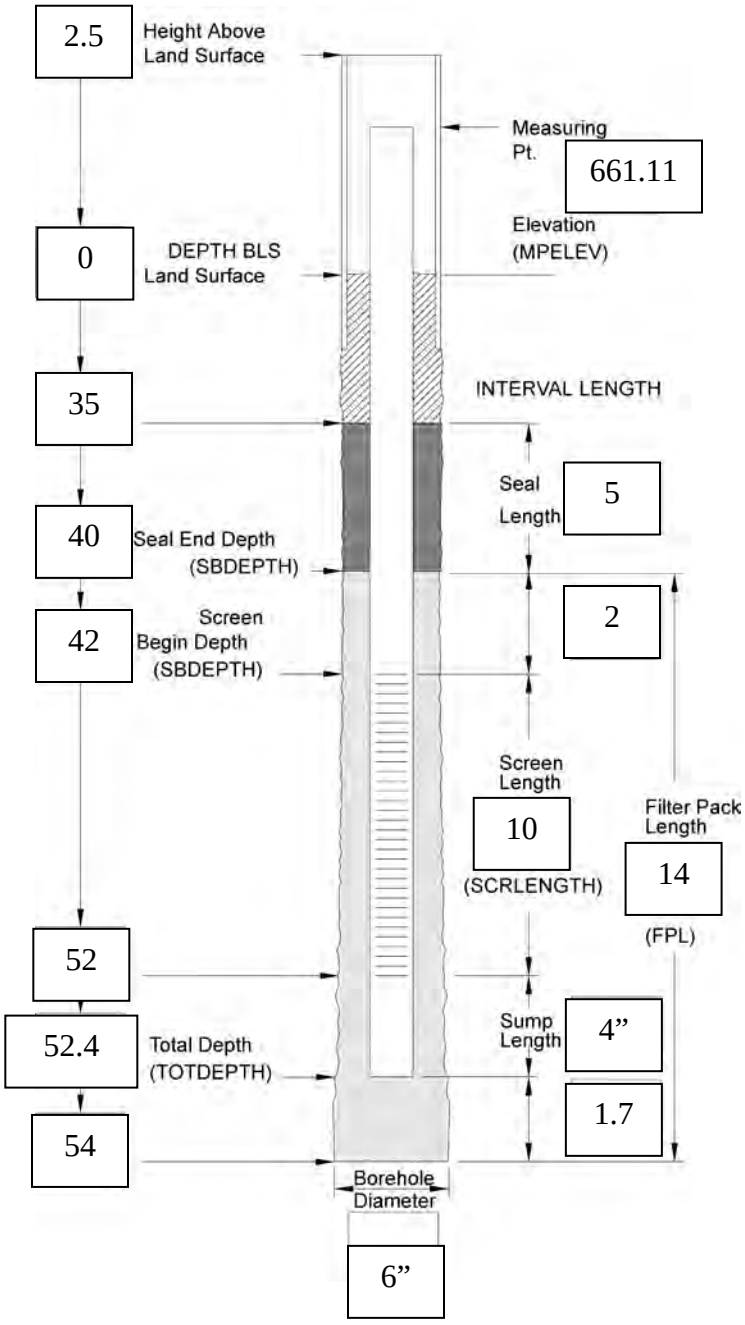
Well Completion
Guard Posts (Y / N) Date: 5/17/2012
Surface Pad Size: 2.0 ft x 2.0 ft
Protective Casing or Cover
Diameter/Type: 5.5-inch steel Procasing.
Depth BGS: _____ Weep Hole ([Y] / N)
Grout
Composition/Proportions: 3.5 bags per 100 gallons water
Quik-Grout
Placement Method: _____
Tremie
Seal Date: 5/16/12
Type: 3/8-inch bentonite chips.
Source: Haliburton
Set-up/Hydration Time: 16 hours
Placement Method: Gravity
Vol. Fluid Added: None
Filter Pack
Type: Filter sand #5
Source: RW Sidley, Inc
Amount Used: 5 bags (50 lb bags)
Placement Method: Gravity
Well Riser Pipe
Casing Material (CMACODE): Schedule 40 PVC
Casing Inside Diameters (CASDIAM): 2.0 in.
Screen
Material: Pre-pack schedule 40 PVC
Inside Diameter (SCRDIAM): 2.0 in.
Screen Slot Size: (SOUA): 0.020 in.
Percent Open Area (PCTOPEN): _____
Sump or Bottom Cap ([Y] / N)
Type/Length: Schedule 40 PVC/0.4 feet
Backfill Plug ([Y] / N)
Material: Bentonite chips
Placement Method: Gravity
Set-up/Hydration Time: 16 hours
Total Water Volume During Construction
Introduced (Gal): 0 Recovered (Gal): 30
Reviewed
By: _____ Date: _____

Geosyntec consultants

WELL CONSTRUCTION LOG
ABOVE GROUND COMPLETION

Well I.D. (LOCID): 2016-03
Drilling Company: Frontz Drilling
Drillers: Aaron Mackey
Geologist/Engineer: Chase Christenson
Signature: _____

Site: AEP – Gavin Project Number: CHE8259A
Installation Method: HSA
Casing Installation Date (INSDATE): 3/23/16
Well Type (WTCCODE): Monitoring Well
Well Completion Method (WCMCODE): _____
Geologic Completion Zone (GZCODE): _____



Well Completion
Guard Posts (Y / N) Date: _____
Surface Pad Size: _____ ft x _____ ft
Protective Casing or Cover
Diameter/Type: 6" Steel, 5' length
Depth BGS: _____ Weep Hole (Y / N)
Grout
Composition/Proportions: 120 gal
7 gal water: 94 lbs portland cement: 4 lbs bentonite grout
Placement Method: Pressure Tremie

Seal Date: 3/22/16
Type: 3/8" Med, crushed bentonite chips
Source: Baroid – Wyoming Sodium Bentonite (1 bag)
Set-up/Hydration Time: 2 Hours
Placement Method: Poured, Gravity
Vol. Fluid Added: 5 gal
Filter Pack
Type: Sidley #5 & #7 (Choker Sand)
Source: Sidley
Amount Used: 2 – 50 lb bags #5, 0.5 – 50 lb bag #7
Placement Method: Poured Gravity

Well Riser Pipe
Casing Material (CMACODE): Sch. 80 PVC
Casing Inside Diameters (CASDIAM): 2.0 in.
Screen
Material: Sch. 80 PVC 4" Pre-packed
Inside Diameter (SCRDIAM): 2.0 in.
Screen Slot Size: (SOUA): 0.01 (10-Slot) in.
Percent Open Area (PCTOPEN): _____
Sump or Bottom Cap (Y / N)
Type/Length: Sch. 80 PVC 2"
Backfill Plug (Y / N)
Material: Bentonite Chips, 2 – 50 lb bags
Placement Method: Poured, Gravity
Set-up/Hydration Time: N/A
Total Water Volume During Construction
Introduced (Gal): - Recovered _____ (Gal): -
Reviewed By: J. Couch Date: 4/13/2016

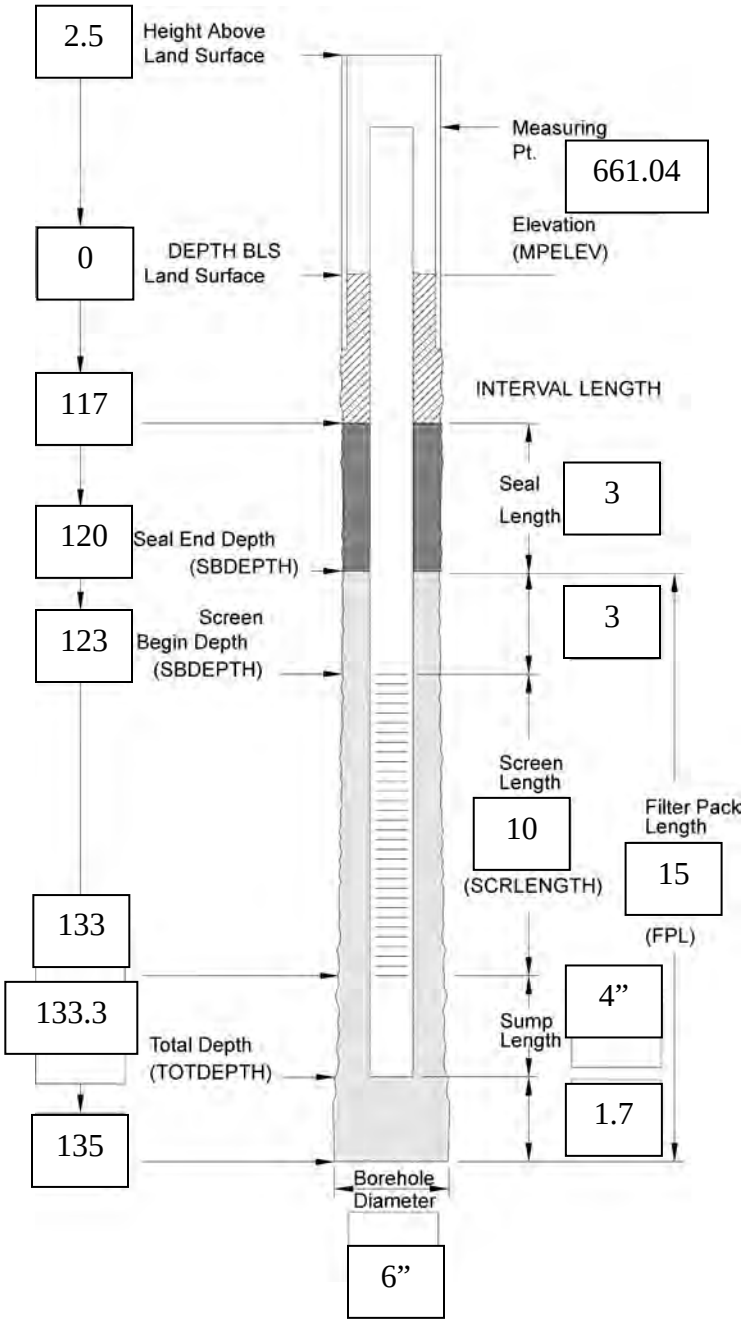
Comments
Feet unless otherwise indicated. Original borehole 75'
Backfilled w/ bentonite chips to 54', 2' of sand below Well.

Geosyntec consultants

WELL CONSTRUCTION LOG
ABOVE GROUND COMPLETION

Well I.D. (LOCID): 2016-04
Drilling Company: Frontz Drilling
Drillers: Aaron Mackey
Geologist/Engineer: C. Christenson / M. Muenich
Signature: _____

Site: AEP – Gavin Project Number: CHE8259A
Installation Method: Air Rotary
Casing Installation Date (INSDATE): 3/28/16
Well Type (WTCCODE): Monitoring Well
Well Completion Method (WCMCODE): _____
Geologic Completion Zone (GZCODE): _____



Well Completion
Guard Posts (Y / N) Date: _____
Surface Pad Size: _____ ft x _____ ft
Protective Casing or Cover
Diameter/Type: 6" Steel, 5' length
Depth BGS: _____ Weep Hole (Y / N)
Grout
Composition/Proportions: _____
7 gal water: 94 lbs portland cement: 4 lbs bentonite grout
Placement Method: Pressure Tremie

Seal Date: 3/28/16 @ 1230
Type: 3/8" med, crushed bentonite chips
Source: Baroid – Wyoming Sodium Bentonite (1 bag)
Set-up/Hydration Time: 2 Hours
Placement Method: Poured, Gravity
Vol. Fluid Added: N/A, submerged
Filter Pack
Type: Sidley #5 & #7 (Choker Sand)
Source: Sidley
Amount Used: 1 – 50 lb bags #5, 3 – 50 lb bag #7
Placement Method: Poured Gravity
Well Riser Pipe
Casing Material (CMACODE): Sch. 80 PVC
Casing Inside Diameters (CASDIAM): 2.0 in.
Screen
Material: Sch. 80 PVC 4" Pre-packed

Inside Diameter (SCRDIAM): 2.0 in.
Screen Slot Size: (SOUA): 0.01 (10-Slot) in.
Percent Open Area (PCTOPEN): _____
Sump or Bottom Cap (Y / N)
Type/Length: Sch. 80 PVC 2"
Backfill Plug (Y / N)
Material: Bentonite Chips (2 – 50 lb bags)
Placement Method: Poured, Gravity
Set-up/Hydration Time: N/A
Total Water Volume During Construction
Introduced (Gal): - Recovered _____
(Gal): -
Reviewed By: J. Couch Date: 4/13/2016

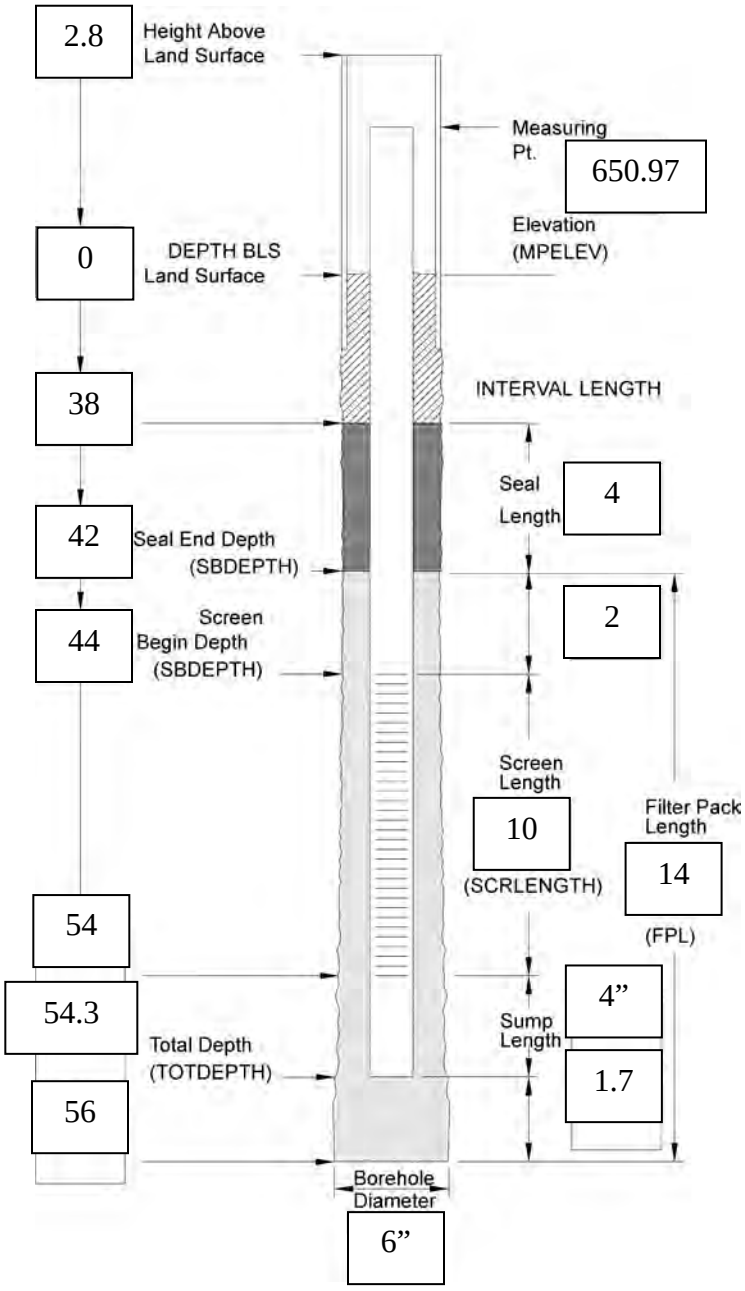
Comments
Feet unless otherwise indicated; Original borehole 150'. Backfilled w/ Bentonite chips to 135'; used 1 centralizer For riser; removed 10' of 6" surface casing, 24' still in ground.

Geosyntec consultants

WELL CONSTRUCTION LOG
ABOVE GROUND COMPLETION

Well I.D. (LOCID): 2016-05
Drilling Company: Frontz Drilling
Drillers: Aaron Mackey
Geologist/Engineer: Mike Muenich
Signature: _____

Site: AEP – Gavin Project Number: CHE8259A
Installation Method: Air Rotary
Casing Installation Date (INSDATE): 3/29/16
Well Type (WTCCODE): Monitoring Well
Well Completion Method (WCMCODE): _____
Geologic Completion Zone (GZCODE): _____



Comments
Feet unless otherwise indicated; total boring depth was 60'. Backfilled to 56' w/ bentonite chips.

Well Completion
Guard Posts (Y / N) Date: _____
Surface Pad Size: _____ ft x _____ ft
Protective Casing or Cover
Diameter/Type: 6" Steel, 5' length
Depth BGS: _____ Weep Hole (Y / N)
Grout
Composition/Proportions: _____
7 gal water: 94 lbs portland cement: 4 lbs bentonite grout
Placement Method: Pressure Tremie

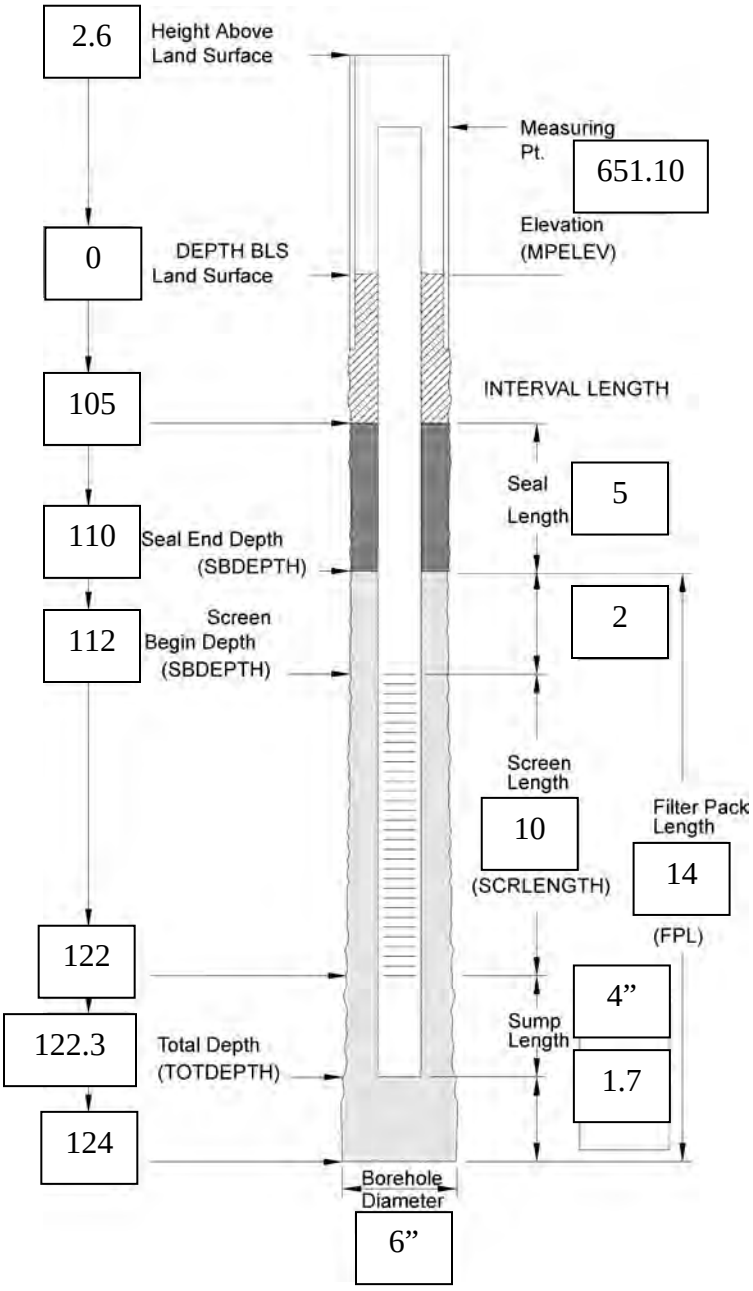
Seal Date: 3/29/16 @ 1115
Type: 3/8" med, crushed bentonite chips
Source: Baroid – Wyoming Sodium Bentonite (1 bag)
Set-up/Hydration Time: Overnight
Placement Method: Poured, Gravity
Vol. Fluid Added: 1 – 50 lb bag + 5 gal.
Filter Pack
Type: Sidley #5 & #7 (Choker Sand)
Source: Sidley
Amount Used: 3 – 50 lb bags #5, 1 – 50 lb bag #7
Placement Method: Poured Gravity
Well Riser Pipe
Casing Material (CMACODE): Sch. 80 PVC
Casing Inside Diameters (CASDIAM): 2.0 in.
Screen
Material: Sch. 80 PVC 4" Pre-packed
Inside Diameter (SCRDIAM): 2.0 in.
Screen Slot Size: (SOUA): 0.01 (10-Slot) in.
Percent Open Area (PCTOPEN): _____
Sump or Bottom Cap (Y) N)
Type/Length: Sch. 80 PVC 2"
Backfill Plug (Y / N)
Material: Bentonite Chips (2 – 50 lb bags)
Placement Method: Poured, Gravity
Set-up/Hydration Time: N/A
Total Water Volume During Construction
Introduced (Gal): - Recovered (Gal): -
Reviewed By: J. Couch Date: 4/13/2016

Geosyntec consultants

WELL CONSTRUCTION LOG
ABOVE GROUND COMPLETION

Well I.D. (LOCID): 2016-06
Drilling Company: Frontz Drilling
Drillers: Aaron Mackey
Geologist/Engineer: Mike Muenich
Signature: _____

Site: AEP – Gavin Project Number: CHE8259A
Installation Method: Air Rotary
Casing Installation Date (INSDATE): 3/29/16
Well Type (WTCCODE): Monitoring Well
Well Completion Method (WCMCODE): _____
Geologic Completion Zone (GZCODE): _____



Well Completion
Guard Posts (Y / N) Date: _____
Surface Pad Size: _____ ft x _____ ft

Protective Casing or Cover
Diameter/Type: 6" Steel, 5' length
Depth BGS: _____ Weep Hole (Y / N)

Grout
Composition/Proportions: _____
6 gal water: 94 lbs portland cement: 5 lbs bentonite grout
Placement Method: Pressure Tremie

Seal Date: 3/29/16 @ 1615
Type: 3/8" med, crushed bentonite chips
Source: Baroid – Wyoming Bentonite (1 bag)
Set-up/Hydration Time: Overnight
Placement Method: Poured, Gravity
Vol. Fluid Added: 1 – 50 lb bag + 5 gal.

Filter Pack
Type: Sidley #5 & #7 (Choker Sand)
Source: Sidley
Amount Used: 3 – 50 lb bags #5, 1 – 50 lb bag #7
Placement Method: Poured Gravity

Well Riser Pipe
Casing Material (CMACODE): Sch. 80 PVC
Casing Inside Diameters (CASDIAM): 2.0 in.

Screen
Material: Sch. 80 PVC 4" pre-packed
Inside Diameter (SCRDIAM): 2.0 in.
Screen Slot Size: (SOUA): 0.01 (10-Slot) in.
Percent Open Area (PCTOPEN): _____
Sump or Bottom Cap (Y) N)
Type/Length: Sch. 80 PVC 2"

Backfill Plug (Y / N)
Material: Bentonite Chips (1 – 50 lb bag)
Placement Method: Poured, Gravity
Set-up/Hydration Time: N/A

Total Water Volume During Construction
Introduced (Gal): - Recovered _____ (Gal): -

Comments
Feet unless otherwise indicated. Original borehole 140'.
Collapse to ~105', reamed out to 125'.
Backfilled w/ Bentonite chips to 124'.

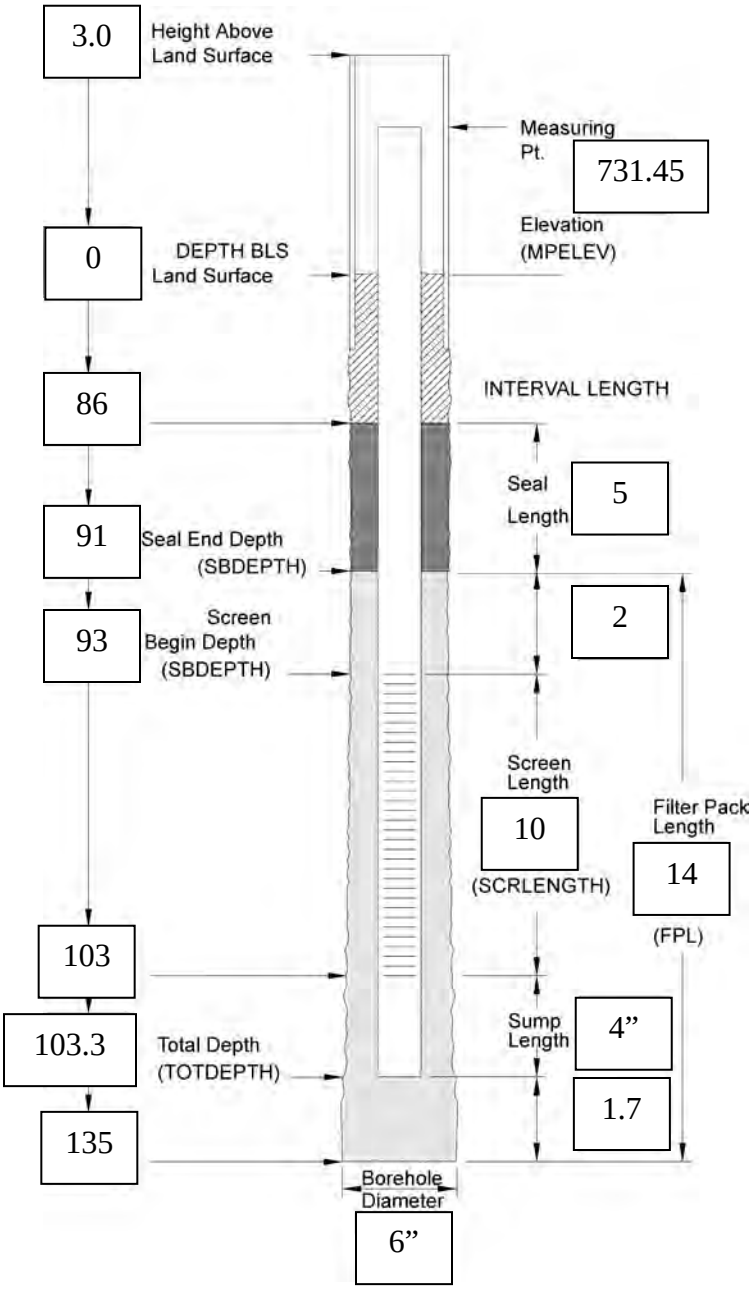
Reviewed By: J. Couch Date: 4/13/2016

Geosyntec consultants

WELL CONSTRUCTION LOG
ABOVE GROUND COMPLETION

Well I.D. (LOCID): 2016-07
Drilling Company: Frontz Drilling
Drillers: Rob Hamilton
Geologist/Engineer: Chase Christenson
Signature: _____

Site: AEP – Gavin Project Number: CHE8259A
Installation Method: Air Rotary
Casing Installation Date (INSDATE): 3/29/16
Well Type (WTCCODE): Monitoring Well
Well Completion Method (WCMCODE): _____
Geologic Completion Zone (GZCODE): _____



Well Completion
Guard Posts (Y / N) Date: _____
Surface Pad Size: 2' x 2' ft x 0.5 ft
Protective Casing or Cover
Diameter/Type: 6" Steel, 5' length
Depth BGS: _____ Weep Hole (Y / N)
Grout
Composition/Proportions: 245 gal
7 gal water: 94 lbs portland cement: 4 lbs bentonite grout
Placement Method: Pressure Tremie

Seal Date: 3/22/16
Type: 3/8" med, crushed bentonite chips
Source: Baroid – Wyoming Sodium Bentonite (1 bag)
Set-up/Hydration Time: Overnight
Placement Method: Poured, Gravity
Vol. Fluid Added: 1 – 50 lb bag + 5 gal.
Filter Pack
Type: Sidley #5 & #7 above screen (Choker Sand)
Source: Sidley
Amount Used: 8 – 50 lb bags
Placement Method: Poured Gravity
Well Riser Pipe
Casing Material (CMACODE): Sch. 80 PVC
Casing Inside Diameters (CASDIAM): 2.0 in.
Screen
Material: Sch. 80 PVC 4" Pre-packed
Inside Diameter (SCRDIAM): 2.0 in.
Screen Slot Size: (SOUA): 0.01 (10-Slot) in.
Percent Open Area (PCTOPEN): _____
Sump or Bottom Cap (Y / N)
Type/Length: Sch. 80 PVC 2"
Backfill Plug (Y / N)
Material: Bentonite Chips
Placement Method: Poured, Gravity
Set-up/Hydration Time: N/A
Total Water Volume During Construction
Introduced (Gal): - Recovered _____ (Gal): -
Reviewed By: J. Couch Date: 4/13/2016

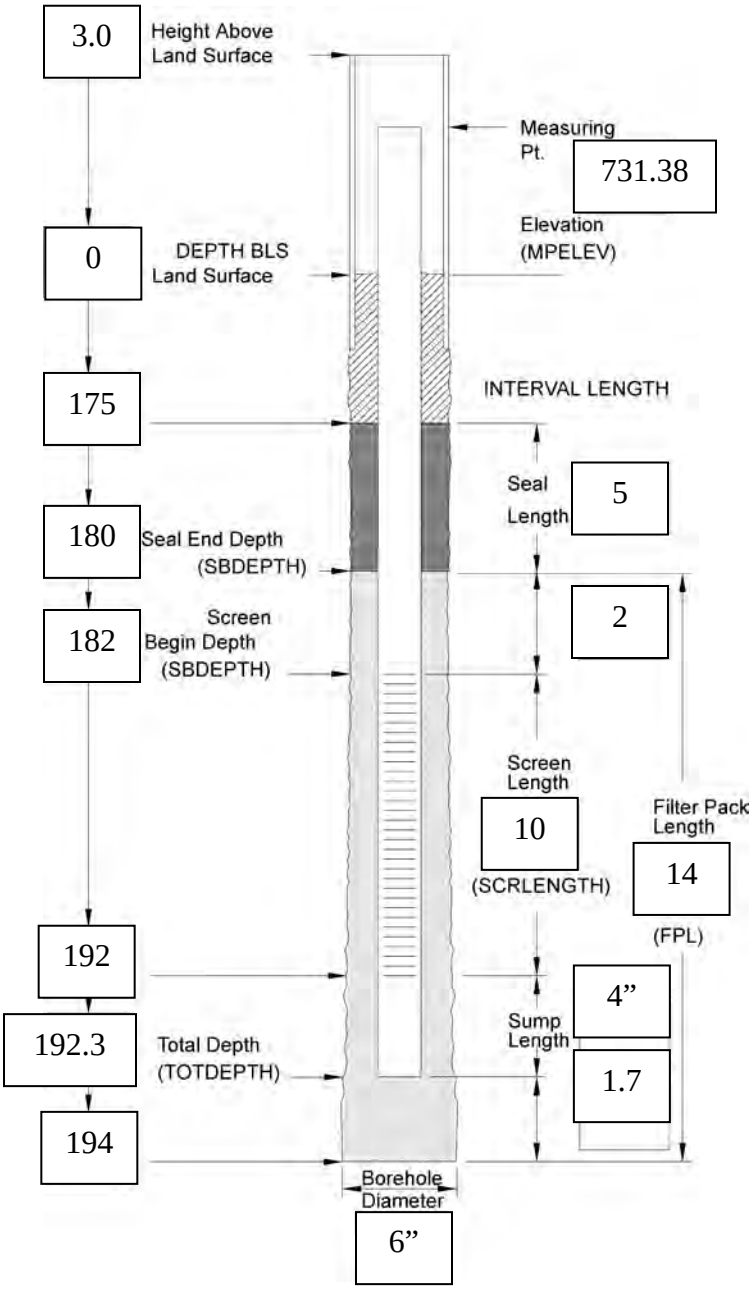
Comments
Feet unless otherwise indicated. Original borehole 135' Backfilled w/ bentonite chips to 105'. #5 Sidley Sand 105' – 103.3'.

Geosyntec consultants

WELL CONSTRUCTION LOG
ABOVE GROUND COMPLETION

Well I.D. (LOCID): 2016-08
Drilling Company: Frontz Drilling
Drillers: Rob Hamilton
Geologist/Engineer: Chase Christenson
Signature: _____

Site: AEP – Gavin Project Number: CHE8259A
Installation Method: Sonic
Casing Installation Date (INSDATE): 3/23/16
Well Type (WTCCODE): Monitoring Well
Well Completion Method (WCMCODE): _____
Geologic Completion Zone (GZCODE): _____



Comments
Feet unless otherwise indicated. Original borehole 221'. Backfilled w/ bentonite chips to 194'.

Well Completion
Guard Posts (Y / N) Date: 3/30/16
Surface Pad Size: 2' x 2' ft x 0.5 ft
Protective Casing or Cover
Diameter/Type: 6" Steel, 5' length
Depth BGS: 2 Weep Hole (Y / N)
Grout
Composition/Proportions: 460 gal
6 gal water: 94 lbs portland cement: 5 lbs bentonite grout
Placement Method: Pressure Tremie

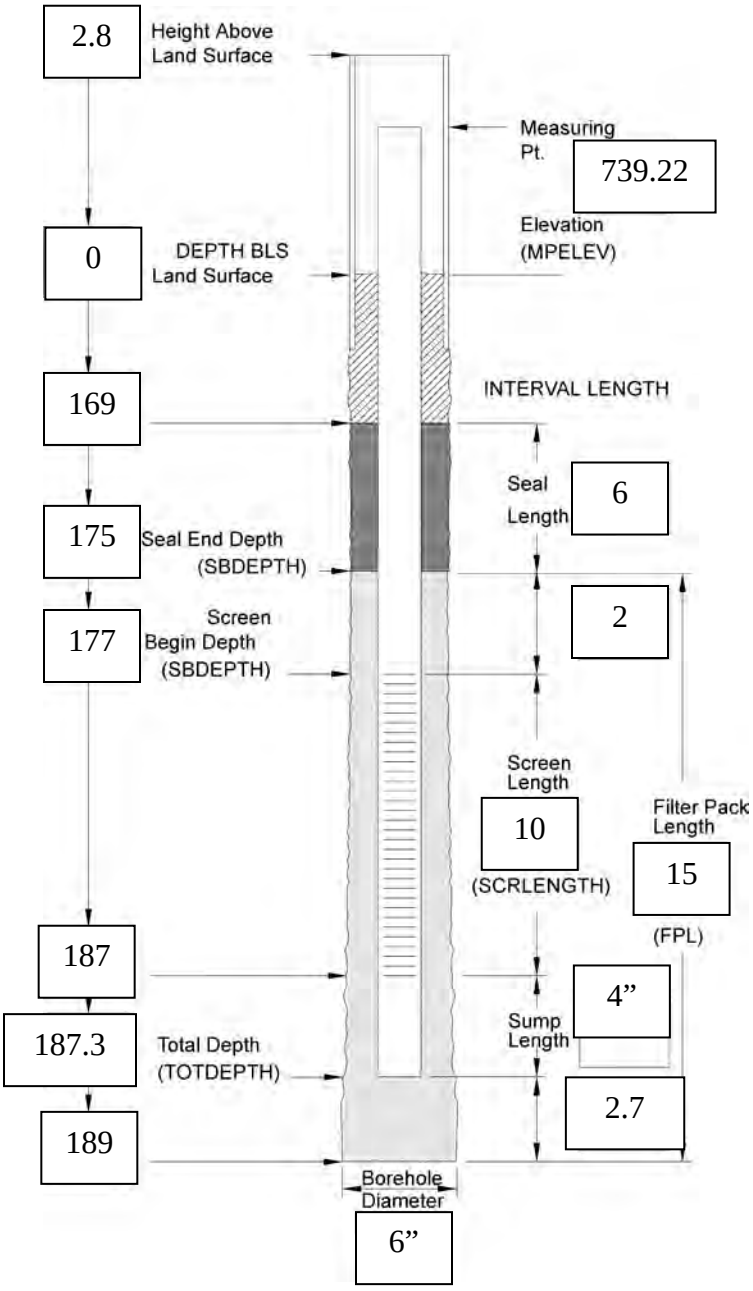
Seal Date: 3/23/16
Type: 3/8" med, crushed bentonite chips
Source: Baroid – Wyoming Bentonite
Set-up/Hydration Time: 2 days
Placement Method: Poured, Gravity
Vol. Fluid Added: N/A, submerged
Filter Pack
Type: Sidley #5 & #7 (Choker Sand)
Source: Sidley
Amount Used: 4 – 50 lb bags #5, 1 – 50 lb bag #7
Placement Method: Poured Gravity
Well Riser Pipe
Casing Material (CMACODE): Sch. 80 PVC
Casing Inside Diameters (CASDIAM): 2.0 in.
Screen
Material: Sch. 80 PVC 4" Pre-packed
Inside Diameter (SCRDIAM): 2.0 in.
Screen Slot Size: (SOUA): 0.01 (10-Slot) in.
Percent Open Area (PCTOPEN): _____
Sump or Bottom Cap (Y N)
Type/Length: Sch. 80 PVC 2"
Backfill Plug (Y / N)
Material: Bentonite, Holeplug
Placement Method: Poured, Gravity
Set-up/Hydration Time: N/A
Total Water Volume During Construction
Introduced (Gal): - Recovered (Gal): -
Reviewed By: J. Couch Date: 4/13/2016

Geosyntec consultants

WELL CONSTRUCTION LOG
ABOVE GROUND COMPLETION

Well I.D. (LOCID): 2016-09
Drilling Company: Frontz Drilling
Drillers: Aaron Mackey
Geologist/Engineer: Chad Gregory
Signature: _____

Site: AEP – Gavin Project Number: CHE8259A
Installation Method: Air Rotary
Casing Installation Date (INSDATE): 3/3/16
Well Type (WTCCODE): Monitoring Well
Well Completion Method (WCMCODE): _____
Geologic Completion Zone (GZCODE): _____



Well Completion
Guard Posts (Y / N) Date: _____
Surface Pad Size: _____ ft x _____ ft
Protective Casing or Cover
Diameter/Type: 6" Steel, 5' length
Depth BGS: _____ Weep Hole (Y / N)
Grout
Composition/Proportions: 150 gal
7 gal water: 94 lbs portland cement: 4 lbs bentonite grout
Placement Method: Pressure Tremie

Seal Date: 3/3/16
Type: 3/8" med, crushed bentonite chips – 2 bags
Source: Baroid – Wyoming Sodium Bentonite
Set-up/Hydration Time: 2 hours
Placement Method: Poured, Gravity
Vol. Fluid Added: N/A, submerged
Filter Pack
Type: Sidley #5 & #7 (Choker Sand)
Source: Sidley
Amount Used: 4 – 50 lb bags #5
Placement Method: Poured Gravity
Well Riser Pipe
Casing Material (CMACODE): Sch. 80 PVC
Casing Inside Diameters (CASDIAM): 2.0 in.
Screen
Material: Sch. 80 PVC 4" pre-packed
Inside Diameter (SCRDIAM): 2.0 in.
Screen Slot Size: (SOUA): 0.01 (10-Slot) in.
Percent Open Area (PCTOPEN): _____
Sump or Bottom Cap (Y) N)
Type/Length: Sch. 80 PVC 2"
Backfill Plug (Y / N)
Material: Bentonite chips (2 – 50 lb bags)
Placement Method: Poured, Gravity
Set-up/Hydration Time: N/A
Total Water Volume During Construction
Introduced (Gal): _____ Recovered (Gal): _____
Reviewed By: J. Couch Date: 4/13/2016

Comments
Feet unless otherwise indicated. Original borehole 200'. Backfilled w/ Bentonite chips to 189'. 70' of 6" PVC surface casing left in hole 10 – 80' bgs.

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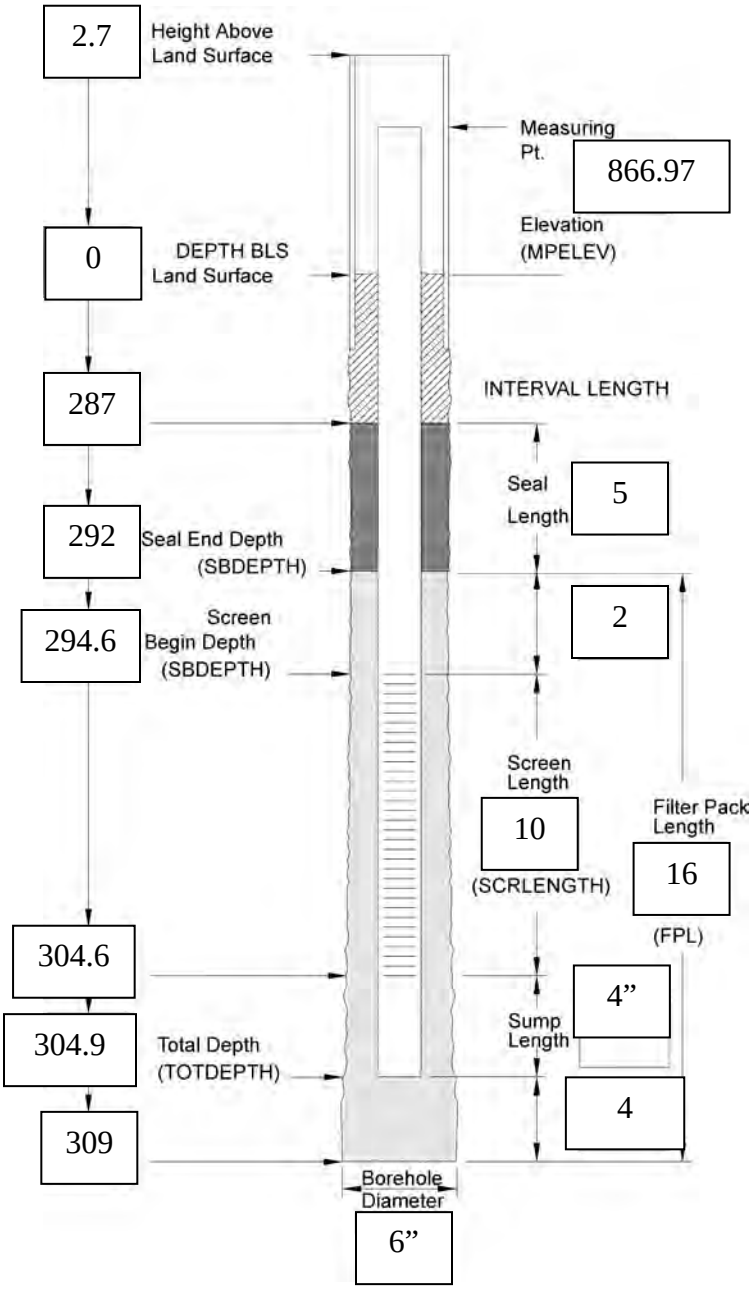
WELL CONSTRUCTION LOG
ABOVE GROUND COMPLETION

Well I.D. (LOCID): 2016-10
Drilling Company: Frontz Drilling
Drillers: Rob Hamilton
Geologist/Engineer: Chad Gregory
Signature: _____

Site: AEP – Gavin Project Number: CHE8259A
Installation Method: Sonic
Casing Installation Date (INSDATE): 3/4/16
Well Type (WTCCODE): Monitoring Well
Well Completion Method (WCMCODE): _____
Geologic Completion Zone (GZCODE): _____



Comments
Feet unless otherwise indicated. Original borehole 330'. Backfilled w/ Bentonite Chips to 309'. Water introduced during construction to clear out unsettled` Sand. 6" PVC surface casing left in place 20'-230' bgs.

Well Completion
Guard Posts (Y / N) Date: _____
Surface Pad Size: _____ ft x _____ ft

Protective Casing or Cover
Diameter/Type: 6" Steel, 5' length
Depth BGS: _____ Weep Hole (Y / N)

Grout
Composition/Proportions: 625 gal
6 gal water: 94 lbs portland cement: 7 lbs bentonite grout
Placement Method: Pressure Tremie

Seal Date: 3/4/16
Type: 3/8" med, crushed bentonite chips
Source: Baroid – Wyoming Sodium Bentonite (4 bags)
Set-up/Hydration Time: >2 hours
Placement Method: Poured, Gravity
Vol. Fluid Added: N/A, submerged

Filter Pack
Type: Sidley #5 & #7 (Choker Sand)
Source: Sidley
Amount Used: 9 – 50 lb bags
Placement Method: Poured Gravity

Well Riser Pipe
Casing Material (CMACODE): Sch. 80 PVC
Casing Inside Diameters (CASDIAM): 2.0 in.

Screen
Material: Sch. 80 PVC 4" pre-packed
Inside Diameter (SCRDIAM): 2.0 in.
Screen Slot Size: (SOUA): 0.01 (10-Slot) in.
Percent Open Area (PCTOPEN): _____
Sump or Bottom Cap (Y) N)
Type/Length: Sch. 80 PVC 2"

Backfill Plug (Y / N)
Material: Bentonite, Holeplug (10 bags)
Placement Method: Poured, Gravity
Set-up/Hydration Time: N/A

Total Water Volume During Construction
Introduced (Gal): 250 Recovered (Gal): 200

Reviewed By: J. Couch Date: 4/13/2016

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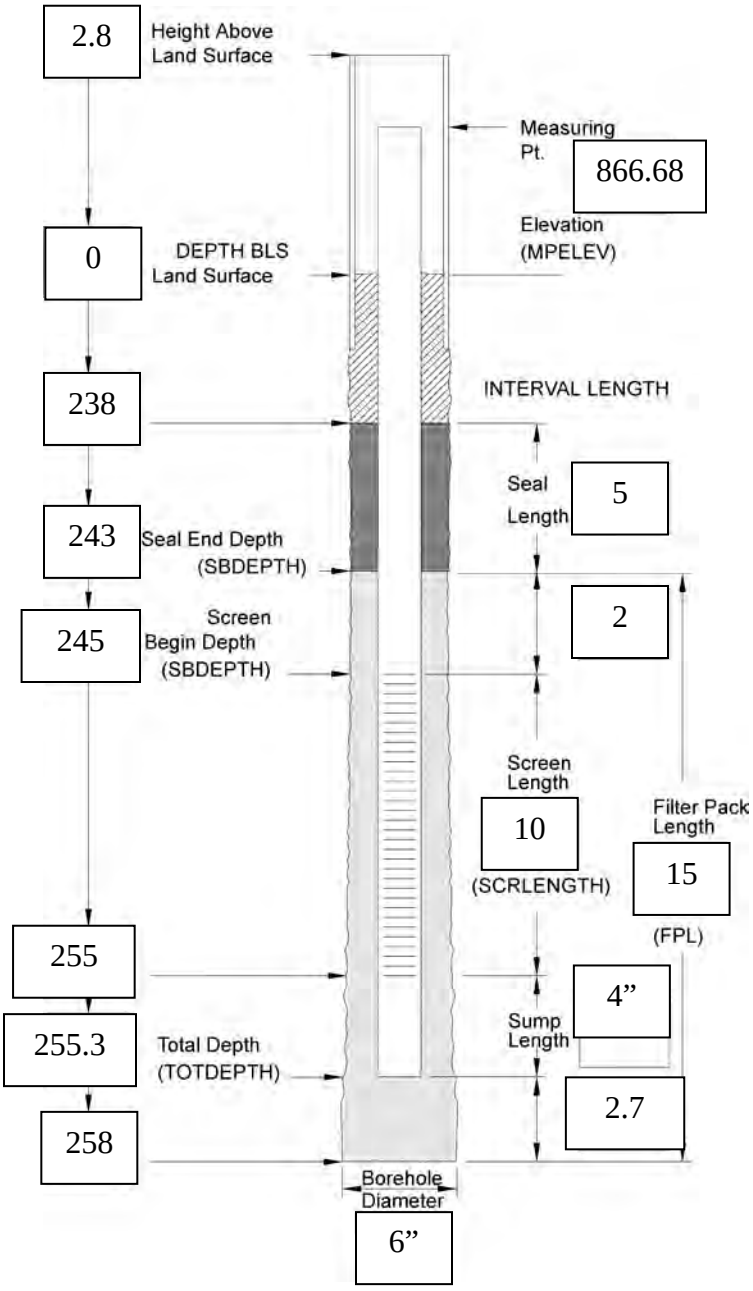
WELL CONSTRUCTION LOG
ABOVE GROUND COMPLETION

Well I.D. (LOCID): 2016-11
Drilling Company: Frontz Drilling
Drillers: Rob Hamilton
Geologist/Engineer: Chad Gregory
Signature: _____

Site: AEP – Gavin Project Number: CHE8259A
Installation Method: Sonic
Casing Installation Date (INSDATE): 3/4/16
Well Type (WTCCODE): Monitoring Well
Well Completion Method (WCMCODE): _____
Geologic Completion Zone (GZCODE): _____



Well Completion
Guard Posts (Y / N) Date: _____
Surface Pad Size: _____ ft x _____ ft
Protective Casing or Cover
Diameter/Type: 6" Steel, 5' length
Depth BGS: _____ Weep Hole (Y / N)
Grout
Composition/Proportions: 575 gal
6 gal water: 94 lbs portland cement: 7 lbs bentonite grout
Placement Method: Pressure Tremie

Seal Date: 3/3/16
Type: 3/8" med, crushed bentonite chips
Source: Baroid – Wyoming Sodium Bentonite (4 bags)
Set-up/Hydration Time: 24 hours
Placement Method: Poured, Gravity
Vol. Fluid Added: N/A, submerged
Filter Pack
Type: Sidley #5 & #7 (Choker Sand)
Source: Sidley
Amount Used: 9 – 50 lb bags
Placement Method: Poured Gravity
Well Riser Pipe
Casing Material (CMACODE): Sch. 80 PVC
Casing Inside Diameters (CASDIAM): 2.0 in.
Screen
Material: Sch. 80 PVC 4" pre-packed
Inside Diameter (SCRDIAM): 2.0 in.
Screen Slot Size: (SOUA): 0.01 (10-Slot) in.
Percent Open Area (PCTOPEN): _____
Sump or Bottom Cap (Y) N)
Type/Length: Sch. 80 PVC 2"
Backfill Plug (Y / N)
Material: Bentonite, Holeplug (1 bag)
Placement Method: Poured, Gravity
Set-up/Hydration Time: N/A
Total Water Volume During Construction
Introduced (Gal): - Recovered _____ (Gal): -
Reviewed By: J. Couch Date: 4/13/2016

Comments
Feet unless otherwise indicated. Original borehole 261'. Backfilled w/ Bentonite holeplug to 258'. 6" PVC surface casing left in place 10'-230' bgs.

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Client: American Electric Power
Project: CHE8259
Address: General James M. Gavin Power Plant

WELL LOG
Well No. MW-16
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Drilling Start Date:	**10/03/2016 16:20**	Boring Depth (ft):	**134.1**	Well Depth (ft):	**119.4**
Drilling End Date:	**10/05/2016/ 09:40**	Boring Diameter (in):	**6**	Well Diameter (in):	**2**
Drilling Company:	**AEP Service Corp.**	Sampling Method(s):	**Rock Core**	Screen Slot (in):	**0.010**
Drilling Method:	**Rotary**	DTW After Drilling (ft):	**107.8**	Riser Material:	**Sch 40 PVC**
Drilling Equipment:	**Diedrich D-120**	Ground Surface Elev. (ft):	**727.961**	Screen Material:	**Sch 40 PVC Slotted**
Driller:	**Zach Racer**	Top of Casing Elev. (ft):	**730.757**	Seal Material(s):	**Bentonite Pellets and Grout**
Logged By:	**Doug Mateas**	Location (X,Y):	**N 349,987.86 E 2,102,252.07**	Filter Pack:	**Global #5 Sand**

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
0									Overburden.	0-2 ft: #2 Gravel. 2-3 ft: #57 Gravel Advanced through overburden and incompetent rock with 8" hollow-stem auger to 87 ft bgs. Before well installation, AEP Service Corp. reamed 6" diameter borehole to 121 ft bgs.	0
5											5
10											10
15											15
20											20

NOTES:
1) Coordinates are in Gavin Plant Coordinate System, which varies ±3 ft. from State Plane Ohio South NAD27. Elevation in NGVD1929.
2) "DTW after Drilling" refers to steady-state water level in open borehole (prior to well installation).
3) Geophysical logging used to interpret best depth interval to set the well screen.
4) Monitoring well screened in Morgantown Sandstone.

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Client: American Electric Power
Project: CHE8259
Address: General James M. Gavin Power Plant

WELL LOG
Well No. MW-16
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Drilling Start Date:	**10/03/2016 16:20**	Boring Depth (ft):	**134.1**	Well Depth (ft):	**119.4**
Drilling End Date:	**10/05/2016/ 09:40**	Boring Diameter (in):	**6**	Well Diameter (in):	**2**
Drilling Company:	**AEP Service Corp.**	Sampling Method(s):	**Rock Core**	Screen Slot (in):	**0.010**
Drilling Method:	**Rotary**	DTW After Drilling (ft):	**107.8**	Riser Material:	**Sch 40 PVC**
Drilling Equipment:	**Diedrich D-120**	Ground Surface Elev. (ft):	**727.961**	Screen Material:	**Sch 40 PVC Slotted**
Driller:	**Zach Racer**	Top of Casing Elev. (ft):	**730.757**	Seal Material(s):	**Bentonite Pellets and Grout**
Logged By:	**Doug Mateas**	Location (X,Y):	**N 349,987.86 E 2,102,252.07**	Filter Pack:	**Global #5 Sand**

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
20									Overburden.		20
25											25
30											30
35											35
40											40

NOTES:
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Client: American Electric Power
Project: CHE8259
Address: General James M. Gavin Power Plant

WELL LOG
Well No. MW-16
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Drilling Start Date:	**10/03/2016 16:20**	Boring Depth (ft):	**134.1**	Well Depth (ft):	**119.4**
Drilling End Date:	**10/05/2016/ 09:40**	Boring Diameter (in):	**6**	Well Diameter (in):	**2**
Drilling Company:	**AEP Service Corp.**	Sampling Method(s):	**Rock Core**	Screen Slot (in):	**0.010**
Drilling Method:	**Rotary**	DTW After Drilling (ft):	**107.8**	Riser Material:	**Sch 40 PVC**
Drilling Equipment:	**Diedrich D-120**	Ground Surface Elev. (ft):	**727.961**	Screen Material:	**Sch 40 PVC Slotted**
Driller:	**Zach Racer**	Top of Casing Elev. (ft):	**730.757**	Seal Material(s):	**Bentonite Pellets and Grout**
Logged By:	**Doug Mateas**	Location (X,Y):	**N 349,987.86 E 2,102,252.07**	Filter Pack:	**Global #5 Sand**

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
40									Overburden.		40
45											45
50										Centralizer set at 50' bgs.	50
55											55
60											60

NOTES:
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3) Geophysical logging used to interpret best depth interval to set the well screen.
4) Monitoring well screened in Morgantown Sandstone.

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Client: American Electric Power
Project: CHE8259
Address: General James M. Gavin Power Plant

WELL LOG
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Drilling Start Date:	**10/03/2016 16:20**	Boring Depth (ft):	**134.1**	Well Depth (ft):	**119.4**
Drilling End Date:	**10/05/2016/ 09:40**	Boring Diameter (in):	**6**	Well Diameter (in):	**2**
Drilling Company:	**AEP Service Corp.**	Sampling Method(s):	**Rock Core**	Screen Slot (in):	**0.010**
Drilling Method:	**Rotary**	DTW After Drilling (ft):	**107.8**	Riser Material:	**Sch 40 PVC**
Drilling Equipment:	**Diedrich D-120**	Ground Surface Elev. (ft):	**727.961**	Screen Material:	**Sch 40 PVC Slotted**
Driller:	**Zach Racer**	Top of Casing Elev. (ft):	**730.757**	Seal Material(s):	**Bentonite Pellets and Grout**
Logged By:	**Doug Mateas**	Location (X,Y):	**N 349,987.86 E 2,102,252.07**	Filter Pack:	**Global #5 Sand**

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
60									Overburden.		60
65											65
70											70
75											75
80											80

NOTES:
1) Coordinates are in Gavin Plant Coordinate System, which varies ±3 ft. from State Plane Ohio South NAD27. Elevation in NGVD1929.
2) "DTW after Drilling" refers to steady-state water level in open borehole (prior to well installation).
3) Geophysical logging used to interpret best depth interval to set the well screen.
4) Monitoring well screened in Morgantown Sandstone.

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Client: American Electric Power
Project: CHE8259
Address: General James M. Gavin Power Plant

WELL LOG
Well No. MW-16
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Drilling Start Date:	**10/03/2016 16:20**	Boring Depth (ft):	**134.1**	Well Depth (ft):	**119.4**
Drilling End Date:	**10/05/2016/ 09:40**	Boring Diameter (in):	**6**	Well Diameter (in):	**2**
Drilling Company:	**AEP Service Corp.**	Sampling Method(s):	**Rock Core**	Screen Slot (in):	**0.010**
Drilling Method:	**Rotary**	DTW After Drilling (ft):	**107.8**	Riser Material:	**Sch 40 PVC**
Drilling Equipment:	**Diedrich D-120**	Ground Surface Elev. (ft):	**727.961**	Screen Material:	**Sch 40 PVC Slotted**
Driller:	**Zach Racer**	Top of Casing Elev. (ft):	**730.757**	Seal Material(s):	**Bentonite Pellets and Grout**
Logged By:	**Doug Mateas**	Location (X,Y):	**N 349,987.86 E 2,102,252.07**	Filter Pack:	**Global #5 Sand**

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
80									Overburden.		80
85										Advanced with 4" advancer (4" casing cutting edge and roller bit) from 87 to 99.3 ft bgs.	85
90											90
95										Set 4" steel casing through overburden and incompetent rock to 99.3 ft bgs. Cored with NQ-size core barrel with wireline system from 99.3 to 134.1 ft bgs.	95
100				Run 1			43/58	42.7	(99.3') CLAYSTONE: weak, dark reddish brown		100

NOTES:
1) Coordinates are in Gavin Plant Coordinate System, which varies ±3 ft. from State Plane Ohio South NAD27. Elevation in NGVD1929.
2) "DTW after Drilling" refers to steady-state water level in open borehole (prior to well installation).
3) Geophysical logging used to interpret best depth interval to set the well screen.
4) Monitoring well screened in Morgantown Sandstone.

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Client: American Electric Power
Project: CHE8259
Address: General James M. Gavin Power Plant

WELL LOG
Well No. MW-16
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Drilling Start Date:	10/03/2016 16:20	Boring Depth (ft):	134.1	Well Depth (ft):	119.4
Drilling End Date:	10/05/2016/ 09:40	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	AEP Service Corp.	Sampling Method(s):	Rock Core	Screen Slot (in):	0.010
Drilling Method:	Rotary	DTW After Drilling (ft):	107.8	Riser Material:	Sch 40 PVC
Drilling Equipment:	Diedrich D-120	Ground Surface Elev. (ft):	727.961	Screen Material:	Sch 40 PVC Slotted
Driller:	Zach Racer	Top of Casing Elev. (ft):	730.757	Seal Material(s):	Bentonite Pellets and Grout
Logged By:	Doug Mateas	Location (X,Y):	N 349,987.86 E 2,102,252.07	Filter Pack:	Global #5 Sand

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
100									(10R 3/4) with minor secondary colors of light olive brown (5Y 5/6) and very dusky purple (5RP 2/2), highly decomposed, moderately disintegrated, intensely fractured, massive.		100
				Run 2			120/ 120	67.9	(103.6') CLAYSHALE: strong, dark greenish gray (5G 4/1) with secondary grayish red (10R 4/2), massive, slightly decomposed, competent, unfractured.		
105									(104.7') Sandy silty SHALE: strong to very strong, light greenish gray (5G 4/1) with secondary grayish red (10R 4/2), massive, micaceous, fresh, competent, unfractured. [MORGANTOWN FRM.]		105
									(106.1') Changes to intensely fractured.		
									(107.9') Silty shaley SANDSTONE: strong to very strong, dark greenish gray (5G 4/1), massive, micaceous to very micaceous, fine to medium grained, fresh, competent, unfractured. [MORGANTOWN FRM.]		
110									(108.4') Sandy CLAYSTONE: very weak, dark greenish gray (5G 4/1), massive, micaceous, highly decomposed, moderately disintegrated, intensely fractured. [MORGANTOWN FRM.]		110
									(109.3') Silty shaley SANDSTONE: strong to very strong, dark greenish gray (5G 4/1), cross bedded, micaceous to very micaceous, fine to medium grained, fresh, competent, moderately to intensely fractured. [MORGANTOWN FRM.]		
				Run 3			110.5/ 120	47.5	(113.5') Silty SHALE: moderately strong, grayish red (10R 4/2), massive, slightly micaceous, fresh to slightly decomposed, competent, slightly fractured, slightly calcareous. [MORGANTOWN FRM.]		
115									(114.4') Changes to dark greenish gray (5G 4/1), clay content increases until 115.8 ft.		115
									(118.4') CLAYSTONE: very weak to weak, grayish red (10R 4/2), massive, slickensides, highly decomposed, intensely disintegrated,		
120											120

NOTES:
1) Coordinates are in Gavin Plant Coordinate System, which varies ±3 ft. from State Plane Ohio South NAD27. Elevation in NGVD1929.
2) "DTW after Drilling" refers to steady-state water level in open borehole (prior to well installation).
3) Geophysical logging used to interpret best depth interval to set the well screen.
4) Monitoring well screened in Morgantown Sandstone.

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Client: American Electric Power
Project: CHE8259
Address: General James M. Gavin Power Plant

WELL LOG
Well No. MW-16
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Drilling Start Date:	10/03/2016 16:20	Boring Depth (ft):	134.1	Well Depth (ft):	119.4
Drilling End Date:	10/05/2016/ 09:40	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	AEP Service Corp.	Sampling Method(s):	Rock Core	Screen Slot (in):	0.010
Drilling Method:	Rotary	DTW After Drilling (ft):	107.8	Riser Material:	Sch 40 PVC
Drilling Equipment:	Diedrich D-120	Ground Surface Elev. (ft):	727.961	Screen Material:	Sch 40 PVC Slotted
Driller:	Zach Racer	Top of Casing Elev. (ft):	730.757	Seal Material(s):	Bentonite Pellets and Grout
Logged By:	Doug Mateas	Location (X,Y):	N 349,987.86 E 2,102,252.07	Filter Pack:	Global #5 Sand

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
120									intensely fractured. [MORGANTOWN FRM.]		120
									(121.4') Silty SHALE: strong, grayish red (10R 4/2) with minor secondary variegated colors of grayish red purple (5RP 4/2) and light olive brown (5Y 5/6), slickensides, slightly decomposed, slightly disintegrated, moderately to intensely fractured, calcareous nodules. [MORGANTOWN FRM.]		
125				Run 4			120/ 120	67.8	(124.1') Changes to moderately fractured.		125
									(127.8') Silty sandy SHALE: strong, medium bluish gray (5B 5/1) and dark greenish gray (5G 4/1), massive, very micaceous, fresh, competent, slightly fractured, cross bedded. [MORGANTOWN FRM.]		
130									(129.1') Changes to very sandy.		130
									(130.1') CLAYSHALE: moderately strong to strong, dark greenish gray (5G 4/1), massive, slightly decomposed, slightly disintegrated, intensely fractured, clay infillings in fractures.		
									(130.7') Changes to grayish red (10R 4/2).		
									(132.1') Sandy silty SHALE: strong, dark greenish gray (5G 4/1), massive, micaceous, fresh, competent, unfractured.		
135									(133.1') CLAYSHALE: moderately strong to strong, dark greenish gray (5G 4/1), massive, slightly decomposed, slightly disintegrated, intensely fractured, clay infillings in fractures.		135
									End of boring at 134.1 ft bgs.		
									Well installed on 10/25/2016		
140											140

NOTES:
1) Coordinates are in Gavin Plant Coordinate System, which varies ±3 ft. from State Plane Ohio South NAD27. Elevation in NGVD1929.
2) "DTW after Drilling" refers to steady-state water level in open borehole (prior to well installation).
3) Geophysical logging used to interpret best depth interval to set the well screen.
4) Monitoring well screened in Morgantown Sandstone.

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Client: American Electric Power
Project: CHE8259
Address: General James M. Gavin Power Plant

WELL LOG
Well No. MW-17
Page: 1 of 12

Drilling Start Date:	09/28/2016 12:50	Boring Depth (ft):	229.3	Well Depth (ft):	213.4
Drilling End Date:	10/03/2016 14:40	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	AEP Service Corp.	Sampling Method(s):	SPT & Rock Core	Screen Slot (in):	0.010
Drilling Method:	Rotary	DTW After Drilling (ft):	107.8	Riser Material:	Sch 40 PVC
Drilling Equipment:	Diedrich D-120	Ground Surface Elev. (ft):	727.725	Screen Material:	Sch 40 PVC Slotted
Driller:	Zach Racer	Top of Casing Elev. (ft):	730.638	Seal Material(s):	Bentonite Pellets and Grout
Logged By:	Doug Mateas	Location (X,Y):	N 349,980.08 E 2,102,247.86	Filter Pack:	Global #5 Sand

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS
0										0-2 ft: #2 Gravel. 2-3 ft: #57 Gravel. Advanced through overburden with 4" hollow stem auger to 58 ft bgs. Sampled every 5 ft with 1.5' split spoon. Before well installation, AEP Service Corp. reamed 6" diameter borehole to 217 ft bgs.
5				SPT-1		8 8 7	10.5/18	15	(6.5') Shaley GRAVEL (GW); medium gray (N5), fine to coarse grained, well-graded, some clay, trace sand, moist, medium dense, subrounded to angular micaceous shaley gravel. [FILL]	
10				SPT-2		5 9 11	9/18	20	(11.5') Gravelly CLAY (CL); medium gray (N5), low plasticity, some subangular to angular micaceous shaley gravel, medium stiff, moist. [FILL] (12.5') Shaley GRAVEL (GW); medium light gray (N6), fine to coarse grained, well-graded, angular shaley gravel, micaceous, some sand, medium dense, dry. [FILL]	
15				SPT-3		7 17 23	10.5/18	40	(16.5') SAND (SW); moderately yellow (5Y 7/6) with secondary colors of medium light gray (N6) and very light gray (N8), fine to medium grained, well-graded, little subrounded sandstone gravel, dense, dry. [FILL]	
20										

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Drilling Company:	AEP Service Corp.	Sampling Method(s):	SPT & Rock Core	Screen Slot (in):	0.010
Drilling Method:	Rotary	DTW After Drilling (ft):	107.8	Riser Material:	Sch 40 PVC
Drilling Equipment:	Diedrich D-120	Ground Surface Elev. (ft):	727.725	Screen Material:	Sch 40 PVC Slotted
Driller:	Zach Racer	Top of Casing Elev. (ft):	730.638	Seal Material(s):	Bentonite Pellets and Grout
Logged By:	Doug Mateas	Location (X,Y):	N 349,980.08 E 2,102,247.86	Filter Pack:	Global #5 Sand

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	Date & Time	Blow Counts	Recovery (in)	N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
20										Centralizer at 20' bgs.	20
				SPT-4		7 12 17	8/18	29	(21.5') Silty SAND (SM); very light gray sand (N7) and medium gray (N5), fine grained, poorly graded, some silt with platy/shaley structure, medium dense, dry to moist, sand content decreases and silt content increases down section. [FILL]		
25				SPT-5		10 14 18	11/18	32	(26.5') SAND (SW); dark yellowish orange (10YR 6/6) and grayish orange (10YR 7/4), fine to medium grained, well-graded, dense, moist. [FILL]		25
30				SPT-6		14 12 41	8.5/18	53	(31.5') Shaley GRAVEL (GW); medium light gray (N6) with some dusky yellow (5Y 6/4), fine to coarse grained angular shaley gravel, well-graded, trace sand, micaceous, very dense, moist. [FILL]		30
35				SPT-7		18 7 9	9/18	16	(36.5') Shaley GRAVEL (GW); medium gray (N5), fine to coarse grained subangular to angular shaley gravel, well-graded, few clay, trace sand, medium dense, dry. [FILL]		35
40											40

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Drilling Company:	AEP Service Corp.	Sampling Method(s):	SPT & Rock Core	Screen Slot (in):	0.010
Drilling Method:	Rotary	DTW After Drilling (ft):	107.8	Riser Material:	Sch 40 PVC
Drilling Equipment:	Diedrich D-120	Ground Surface Elev. (ft):	727.725	Screen Material:	Sch 40 PVC Slotted
Driller:	Zach Racer	Top of Casing Elev. (ft):	730.638	Seal Material(s):	Bentonite Pellets and Grout
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DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	Date & Time	Blow Counts	Recovery (in)	N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
40											40
				SPT-8		12 14 14	5/18	28	(41.5') SAND (SP); dark yellowish orange (10YR 6/6) and very light gray (N8), medium grained, poorly graded, few poorly cemented sandstone gravel, medium dense, moist. [FILL]		
45				SPT-9		11 27 33	15/18	60	(46.5') CLAYSHALE: moderately brown (5YR 3/4), slickensides, hard, dry to moist, fissile.		45
50				SPT-10		50/4	1/4	50/4	(51.5') CLAYSHALE: moderately brown (5YR 4/4), fissile, hard, moist.		50
55				SPT-11		50/5	5/5	50/5	(56.5') Sandy CLAYSHALE: medium light gray (N6) and pale reddish brown (10R 5/4), fissile, hard, moist.		55
				Run 1			78.5/76	65.8	(58') SANDSTONE: light gray (N7) with medium gray (N5), cross bedded, strong, fine grained, fresh and competent, intensely fractured, very micaceous.	Auger refusal at 57.9 ft bgs. Cored with NQ-size core barrel with wireline system from 58 to 229.3 ft bgs.	
60											60

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Drilling Method:	Rotary	DTW After Drilling (ft):	107.8	Riser Material:	Sch 40 PVC
Drilling Equipment:	Diedrich D-120	Ground Surface Elev. (ft):	727.725	Screen Material:	Sch 40 PVC Slotted
Driller:	Zach Racer	Top of Casing Elev. (ft):	730.638	Seal Material(s):	Bentonite Pellets and Grout
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DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS
60									(58.8') Shaley silty SANDSTONE: strong, medium bluish gray (5B 5/1), fine grained, slightly fissile, fresh, competent, unfractured.	
									(60.4') CLAYSTONE/CLAYSHALE: very weak, medium gray (N5), fissile, highly decomposed, moderately disintegrated, intensely fractured.	
									(61.4') Changes to grayish red (5R 4/2).	
65				Run 2			110.5/ 120	61.7	(64.3') MUDSTONE: very weak to weak, dark yellowish brown (10YR 4/2), fissile, very highly decomposed (residual soil), intensely disintegrated, intensely fractured.	
									(66.1') Sandy silty SHALE: strong, dark yellowish brown (10YR 4/2), massive, locally fissile, fresh, competent, slightly fractured, micaceous, slickensides.	
70									(70.4') MUDSTONE: very highly decomposed, grayish olive (10Y 4/2).	
									(71.7') Carbonaceous SHALE: strong, grayish olive (10Y 4/2), massive, slickensides, calcareous, moderately decomposed, slightly disintegrated, moderately to intensely fractured.	
75				Run 3			74/ 120	27.9	(76.3') Transitions to variegated colors of grayish red (5R 4/2) with some grayish olive (10Y 4/2) and light olive brown (5Y 5/6).	
									(77.2') MUDSTONE: grayish red (10R 4/2), very highly decomposed.	
80										

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Drilling Method:	Rotary	DTW After Drilling (ft):	107.8	Riser Material:	Sch 40 PVC
Drilling Equipment:	Diedrich D-120	Ground Surface Elev. (ft):	727.725	Screen Material:	Sch 40 PVC Slotted
Driller:	Zach Racer	Top of Casing Elev. (ft):	730.638	Seal Material(s):	Bentonite Pellets and Grout
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DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS
80									(80.7') CLAYSTONE: very weak, pale reddish brown (10R 5/4), massive, highly decomposed, slightly disintegrated, intensely fractured, slightly calcareous. (82.2') Changes to not calcareous.	
85				Run 4			70/ 120	42.5	(84.3') CLAYSTONE: weak, grayish red (5R 4/2) with some variegated colors of very dusky purple (5RP 2/2), light olive brown (5Y 5/6) and dark greenish gray (5G 4/1), highly decomposed, moderately disintegrated, slightly to moderately fractured, clay infillings in fractures, slickensides. (88.6') Changes to moderately strong, moderately decomposed.	
90										Centralizer at 90' bgs.
95				Run 5			70/ 120	20.4	(94.3') Changes to primary color of pale reddish brown (10R 5/4), highly decomposed, intensely fractured, weak. (96.3') Changes to medium brown (5YR 4/4), moderately decomposed, moderately fractured.	
100										

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DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS
100										
105				Run 6			120/120	68.7	(104.3') CLAYSHALE: weak, medium bluish gray (5B 5/1), massive to locally fissile, highly decomposed, intensely disintegrated, intensely fractured. (105.1') Changes to strong, fresh, competent, slightly fractured. (106.7') Sandy silty SHALE: strong, medium bluish gray (5B 5/1), massive, micaceous, fresh, competent, slightly fractured. [MORGANTOWN FRM.] (108.1') SANDSTONE: strong, medium bluish gray (5B 5/1), cross bedded, very micaceous, fine grained, fresh, competent, moderately fractured with vertical fracture from 108.5-109.4'. [MORGANTOWN FRM.]	After coring, advanced with 4" advancer (4" casing cutting edge and roller bit) to 110 ft bgs to set 4" steel casing through overburden and incompetent rock.
110										
115				Run 7			108/120	21.7	(111.7') CLAYSHALE: moderately strong, medium bluish gray (5B 5/1), fissile, moderately decomposed, slightly disintegrated, intensely fractured. [MORGANTOWN FRM.] (112.2') Changes to grayish red (5R 4/2). (114.1') Changes to medium bluish gray (5B 5/1). (114.8') Changes to grayish red (5R 4/2).	
120									(118.1') Changes to grayish red (10R 4/2) with some variegated colors of grayish red purple (5RP 4/2) and light olive brown (5Y 5/6), slickensides appear, intensely disintegrated,	

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Drilling Method:	Rotary	DTW After Drilling (ft):	107.8	Riser Material:	Sch 40 PVC
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120									minor calcareous nodules, massive. (119.8') Changes to strong, slightly disintegrated.		120
				Run 8			120/ 120	57.5			
125									(127.2') Silty sandy SHALE: strong, medium bluish gray (5B 5/1), massive to slightly fissile, very micaceous, fresh, competent, slightly fractured, some clay infillings in fracture at top. [MORGANTOWN FRM.]		125
130									(130.5') CLAYSHALE: moderately strong, grayish red (10R 4/2), fissile, moderately decomposed, slightly disintegrated, intensely fractured, clay infillings in fractures.		130
				Run 9			119.5/ 120	57.1			
135									(134.3') Silty SHALE: strong to very strong, medium bluish gray (5B 5/1), massive, locally sandy from 135.0-136.5', slightly decomposed, competent, slightly fractured, pyritic, micaceous, minor calcareous nodules.		135
									(137.6') CLAYSHALE/CLAYSTONE: strong, medium bluish gray (5B 5/1), massive, slightly decomposed, competent, moderately fractured. (138.6') Changes to weak, fissile, moderately to highly decomposed, moderately disintegrated,		
140											140

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140									intensely fractured, clay infillings in fractures.		140
									(140.2') CLAYSHALE: moderately strong, grayish red (5R 4/2), fissile, highly decomposed, slightly disintegrated, intensely fractured, clay infillings in fractures.		
									(142.6') Carbonaceous SHALE: strong, grayish red (10R 4/2) with variegated colors of light olive brown (5Y 5/6) and grayish red purple (5RP 4/2), massive, slickensides, calcareous, slightly decomposed, moderately disintegrated, moderately to intensely fractured.		
145				Run 10			96.5/ 120	40.8	(144.3') Changes to slightly calcareous.		145
									(146.2') MUDSTONE: moderately strong, grayish red (5R 4/2) and medium bluish gray (5B 5/1), massive, slickensides, large amount of mud inclusions, moderately decomposed, moderately disintegrated, moderately fractured.		
150									(149.2') CLAYSHALE: strong, variegated colors of very dusky purple (5P 2/2), light olive brown (5Y 5/6), dark reddish brown (10R 3/4) and moderately red (5R 5/4), massive, slickensides, moderately decomposed, moderately disintegrated, moderately fractured.	Centralizer at 150' bgs.	150
155				Run 11			58/ 120	19.2	(155.1') CLAYSTONE: moderately strong to weak, grayish red (10R 4/2) with secondary medium bluish gray (5B 5/1), massive, slickensides, highly decomposed, moderately disintegrated, intensely fractured with clay infillings in fractures, slightly calcareous.		155
160											160

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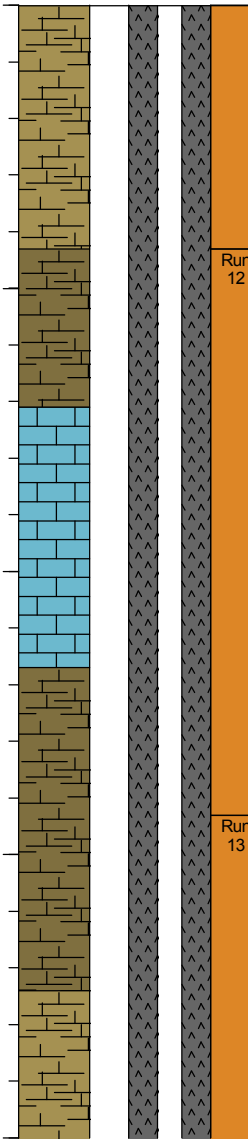

DEPTH (ft)	Sample Type	Date & Time	Blow Counts	Recovery (in)	N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS
160							
165	Run 12			119.5/ 120	51.3	(164.3') CLAYSHALE/CLAYSTONE: moderately strong, variegated colors of very dusky purple (5P 2/2), light olive brown (5Y 5/6) and dark reddish brown (10R 3/4), massive, slickensides, moderately decomposed, moderately disintegrated, intensely fractured.	
						(167.1') Clayey LIMESTONE: weak to moderately strong, dark reddish brown (10R 3/4) with secondary light olive brown (5Y 5/6) and very dusky purple (5RP 2/2), microcrystalline, slickensides, moderately to intensely decomposed, moderately disintegrated, moderately to intensely fractured.	
170						(171.7') CLAYSHALE: very strong, dark reddish brown (10R 3/4), massive, slickensides, fresh, competent, slightly fractured.	
175	Run 13			119/ 120	47.5	(174.3') Large amount of competently healed fractures with mud infillings.	
						(176.8') Changes to intensely fractured.	
						(177.4') CLAYSTONE: weak to moderately strong, grayish red (5R 4/2) with minor secondary colors of light olive brown (5Y 5/6) and grayish red purple (5RP 4/2), massive, slickensides, moderately to highly decomposed, moderately disintegrated, intensely fractured.	
180							

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Drilling Equipment:	Diedrich D-120	Ground Surface Elev. (ft):	727.725	Screen Material:	Sch 40 PVC Slotted
Driller:	Zach Racer	Top of Casing Elev. (ft):	730.638	Seal Material(s):	Bentonite Pellets and Grout
Logged By:	Doug Mateas	Location (X,Y):	N 349,980.08 E 2,102,247.86	Filter Pack:	Global #5 Sand

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
180									(178.6') Changes to strong, slightly decomposed, slightly disintegrated. (178.8') Calcareous nodules appear.		180
				Run 14			105/ 120	38.8			
185									(186.9') Large calcareous nodule. (187.2') Calcareous nodules disappear, changes to strong, fissile, moderately decomposed, competent.		185
									(188.3') Changes to medium bluish gray (5B 5/1), weak, highly decomposed, moderately disintegrated.		
190									(188.8') Carbonaceous SHALE: very strong, greenish gray (5G 6/1), massive, slickensides, pyritic at unit top, micaceous, fresh to slightly decomposed, competent, unfractured, calcareous.		190
									(189.9') CLAYSHALE: moderately strong, grayish brown (5YR 3/2) with thin laminations of light olive brown (5Y 5/6), fissile, moderately decomposed, competent to slightly disintegrated, intensely fractured.		
				Run 15			112/ 112	95.1			
195									(194.3') Sandy silty SHALE: strong, dark greenish gray (5G 4/1), massive, very fine grained sand, micaceous, fresh, competent, unfractured. [COW RUN FRM.]		195
200											200

NOTES:
1) Coordinates are in Gavin Plant Coordinate System, which varies ±3 ft. from State Plane Ohio South NAD27. Elevation in NGVD1929.
2) "DTW after Drilling" refers to steady-state water level in open borehole (prior to well installation).
3) Geophysical logging used to interpret best depth interval to set the well screen.
4) Monitoring well screened in Morgantown Sandstone.

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Client: American Electric Power
Project: CHE8259
Address: General James M. Gavin Power Plant

WELL LOG
Well No. MW-17
Page: 11 of 12

Drilling Start Date:	09/28/2016 12:50	Boring Depth (ft):	229.3	Well Depth (ft):	213.4
Drilling End Date:	10/03/2016 14:40	Boring Diameter (in):	6	Well Diameter (in):	2
Drilling Company:	AEP Service Corp.	Sampling Method(s):	SPT & Rock Core	Screen Slot (in):	0.010
Drilling Method:	Rotary	DTW After Drilling (ft):	107.8	Riser Material:	Sch 40 PVC
Drilling Equipment:	Diedrich D-120	Ground Surface Elev. (ft):	727.725	Screen Material:	Sch 40 PVC Slotted
Driller:	Zach Racer	Top of Casing Elev. (ft):	730.638	Seal Material(s):	Bentonite Pellets and Grout
Logged By:	Doug Mateas	Location (X,Y):	N 349,980.08 E 2,102,247.86	Filter Pack:	Global #5 Sand

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT: Sample Type	COLLECT: Date & Time	COLLECT: Blow Counts	COLLECT: Recovery (in)	COLLECT: N Value RQD (%)	SOIL/ROCK VISUAL DESCRIPTION	REMARKS	DEPTH (ft)
200									(200.3') Changes to intensely fractured, some clay infillings in fractures until 200.7 ft.		200
				Run 16			120/ 120	70.0			
205									(205.3') Changes to moderately to intensely fractured. (206.1') Some clay infillings in fractures. (207.4') Changes to moderately fractured.		205
210									(210.7') Changes to intensely fractured. (212.3-213.6') Vertical fracture.		210
									(213.6-214.3') No recovery.		
				Run 17			115/ 120	48.8	(214.3') Changes to slightly fractured, no clay infillings in fractures [COW RUN FRM.] (215.5') 0.8 ft section with thin laminations of grayish red (10R 4/2) clayshale. (216.1') Changes to unfractured. (216.4-217') Changes to dark yellowish orange (10YR 6/6), slightly decomposed. (218.2') Thin grayish red (10R 4/2) laminations of clayshale.		
215											215
									(219') CLAYSHALE: moderately strong, grayish		
220											220

NOTES:
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WELL LOG
Well No. MW-17
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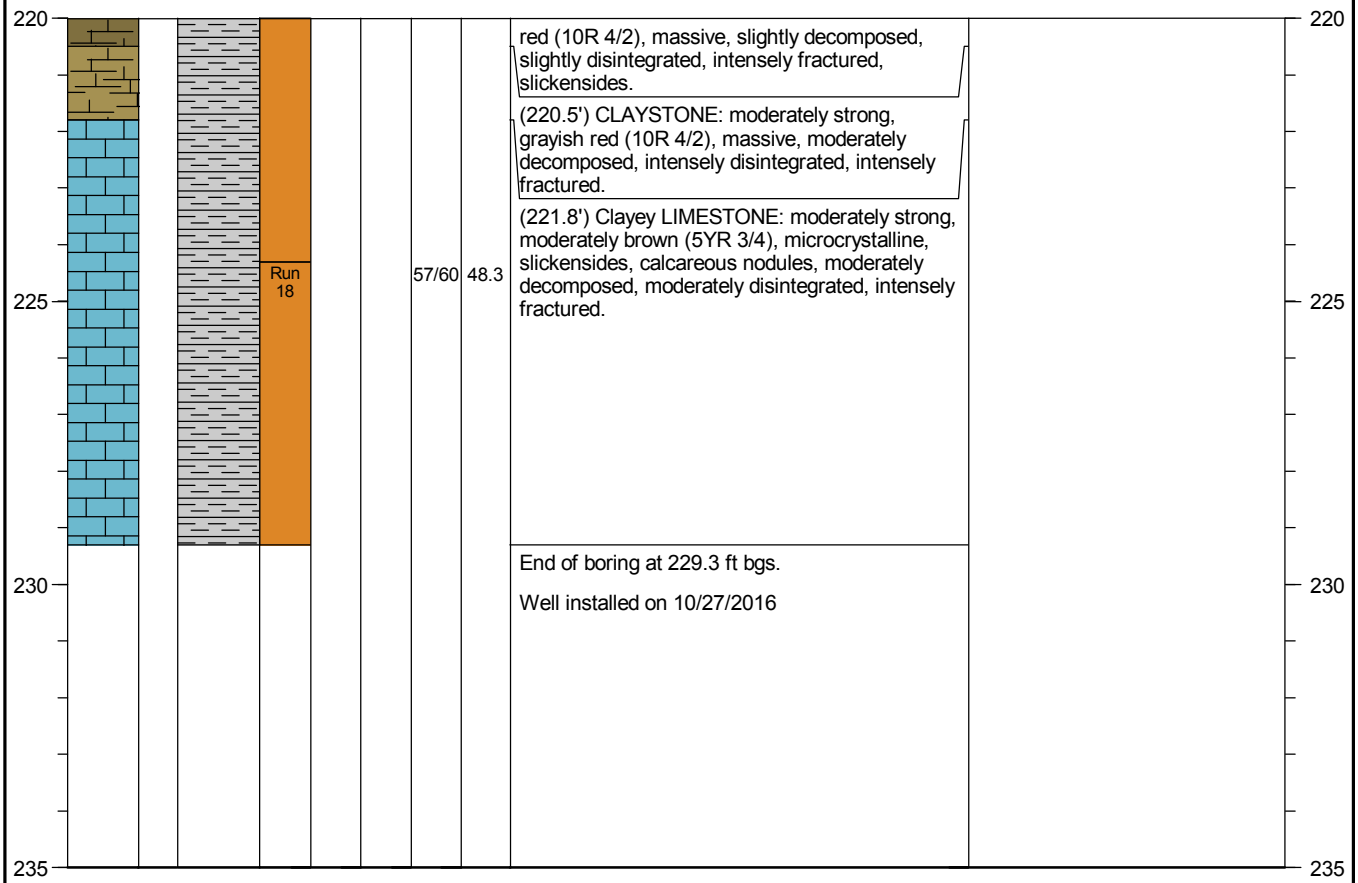
Drilling Method:	Rotary	DTW After Drilling (ft):	107.8	Riser Material:	Sch 40 PVC
Drilling Equipment:	Diedrich D-120	Ground Surface Elev. (ft):	727.725	Screen Material:	Sch 40 PVC Slotted
Driller:	Zach Racer	Top of Casing Elev. (ft):	730.638	Seal Material(s):	Bentonite Pellets and Grout
Logged By:	Doug Mateas	Location (X,Y):	N 349,980.08 E 2,102,247.86	Filter Pack:	Global #5 Sand



NOTES:
1) Coordinates are in Gavin Plant Coordinate System, which varies ±3 ft. from State Plane Ohio South NAD27. Elevation in NGVD1929.
2) "DTW after Drilling" refers to steady-state water level in open borehole (prior to well installation).
3) Geophysical logging used to interpret best depth interval to set the well screen.
4) Monitoring well screened in Morgantown Sandstone.

ERM
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2022-14

Client: Gavin Power, LLC
Project Name: RWL/FAR Monitoring Well Installation
Project Number: 0643653
Project Location: Cheshire, OH

DATE STARTED: 7/23/2022
DATE COMPLETED: 7/24/2022
DRILLING CONTRACTOR: Cascade Drilling
DRILLING METHODS: Sonic Drilling & Wireline Rock Coring
LOGGED BY: J. Maag
CHECKED BY: A. Harford
NOTES: 6" Steel Stickup Protective Casing. Screen location based on results of downhole geophysical survey.

TOTAL DEPTH: 184 feet bgs
DIAMETER: 6 inches
GROUND ELEVATION: 740.42
PVC ELEVATION: 743.04
NORTHING: 345975.5035
EASTING: 2070349.795

WELL DEVELOPMENT
METHOD(S): Mega Monsoon & Bailer
DATE STARTED: 9/7/2022
DATE ENDED: 11/6/2022
DTW AT START: 163.63 feet bgs
DTW AT END: 179.38 feet bgs
VOLUME PURGED: 15.1 gallons

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION
						Yellowish Brown, SANDY SILT, fine grained sand, non-plastic, soft, wet.
						1.0
5	735	SC	84			Yellowish Brown, FINE SAND, subrounded few sand cobbles, some mica, well sorted, very loose, dry.
						7.0
10	730	SC	12			Gray, FINE SANDY SILT, mostly mica, non-plastic, dense, wet.
15	725					17.0
						Gray, CLAYSTONE, some mica, massive, slightly weathered, very weak.
						19.0
20	720	HQ	120	13.3		Gray, CLAY SHALE, very thinly laminated, intensely weathered, very weak, wet.
25	715					

WELL DIAGRAM

- Concrete Pad and 6" Steel Stickup Protective Casing
- Bentonite Grout (0 to 152 feet bgs)
- Well Riser (0 to 158 feet bgs) (2" SCH 40 PVC)

SAMPLE TYPE

- Sonic Drilling (SC)
- HQ Wireline Rock Coring (HQ)

GRAPHIC LOG LEGEND

- Sandy Silt
- Well-graded Sand
- Claystone Interbedded Shale
- Shale
- Limestone
- Sandstone

ACRONYM LEGEND

amsl = above mean sea level
bgs = below ground surface
DTW = depth to water
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NM = not measured
NR = no recovery
PVC = polyvinyl chloride

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Client: Gavin Power, LLC
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Project Number: 0643653
Project Location: Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
						Gray, CLAY SHALE, very thinly laminated, intensely weathered, very weak, wet. *(continued)*	
						28.5	
30	710	HQ	120	0		Gray, CLAY SHALE, very thinly laminated, intensely weathered-disintegrated, very weak, dry.	
35	705					37.0	
40	700	HQ	78	5.1		Gray, CLAY SHALE, very thinly laminated, moderately weathered, weak, wet.	← Bentonite Grout (0 to 152 feet bgs)
45	695					47.0	
						Gray, LIMESTONE, very fine grained, massive, intensely weathered, moderate strength, wet.	
						48.0	
50	690					Gray, CLAY SHALE, little mica and pyrite, very thinly laminated, very weathered, weak, wet.	
						51.0	
		HQ	48			Red, CLAY SHALE, orange, greenish-gray, purple, very thinly laminated, very weathered, weak, wet.	

SAMPLE TYPE

- Sonic Drilling (SC)
- HQ Wireline Rock Coring (HQ)

GRAPHIC LOG LEGEND

- Sandy Silt
- Well-graded Sand
- Claystone Interbedded Shale
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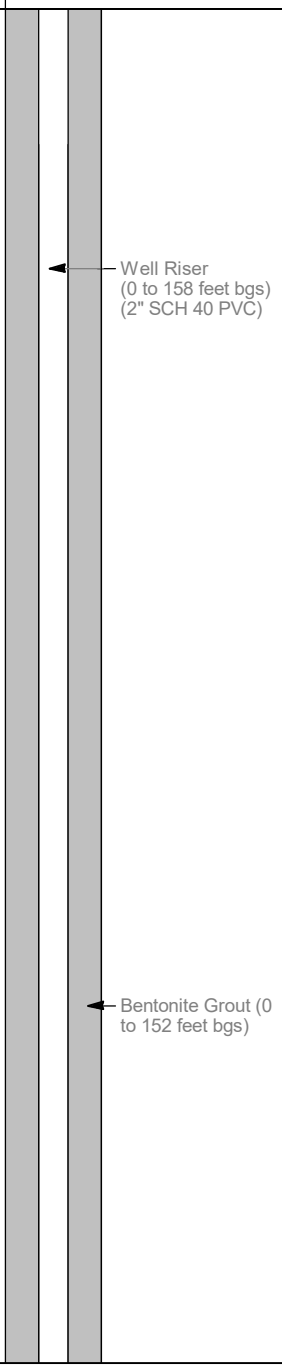
Project Number: 0643653
Project Location: Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION
55	685					Red, CLAY SHALE, orange, greenish-gray, purple, very thinly laminated, very weathered, weak, wet. *(continued)*
60	680	HQ	60	6.7		60.0 Blue Gray, SANDSTONE, Fine grained, massive, little pyrite, slightly weathered, fracture from 60.5-62' (60 degrees), strong, wet. 62.5
65	675					
70	670	HQ	96	20.8		Blue Gray, CLAYSTONE, very thinly laminated, little mica, slightly weathered, weak, wet. 73.0
75	665					Blue Gray, SANDSTONE, fine grained, little mica, massive, fresh, 85 degree fracture (73.5' - 74.5'), strong, wet. 77.0
80	660	HQ	114	44.7		Red, CLAYSTONE, greenish gray, massive, trace mica, slightly weathered, moderate strength, wet.

WELL DIAGRAM



SAMPLE TYPE

- Sonic Drilling (SC)
- HQ Wireline Rock Coring (HQ)

GRAPHIC LOG LEGEND

- Sandy Silt
- Well-graded Sand
- Claystone Interbedded Shale
- Shale
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DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
85	655						
90	650						
95	645	HQ	240	47.1		Red, CLAYSTONE, greenish gray, massive, trace mica, slightly weathered, moderate strength, wet. *(continued)*	
100	640						← Bentonite Grout (0 to 152 feet bgs)
105	635						
110	630						

SAMPLE TYPE

- Sonic Drilling (SC)
- HQ Wireline Rock Coring (HQ)

GRAPHIC LOG LEGEND

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- Well-graded Sand
- Claystone Interbedded Shale
- Shale
- Limestone
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DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
115	625	HQ	156	57.7		Red, CLAYSTONE, greenish gray, massive, trace mica, slightly weathered, moderate strength, wet. *(continued)*	
120	620						
125	615						
130	610						Bentonite Grout (0 to 152 feet bgs)
135	605	HQ	234	48.3			
140	600						

SAMPLE TYPE

- Sonic Drilling (SC)
- HQ Wireline Rock Coring (HQ)

GRAPHIC LOG LEGEND

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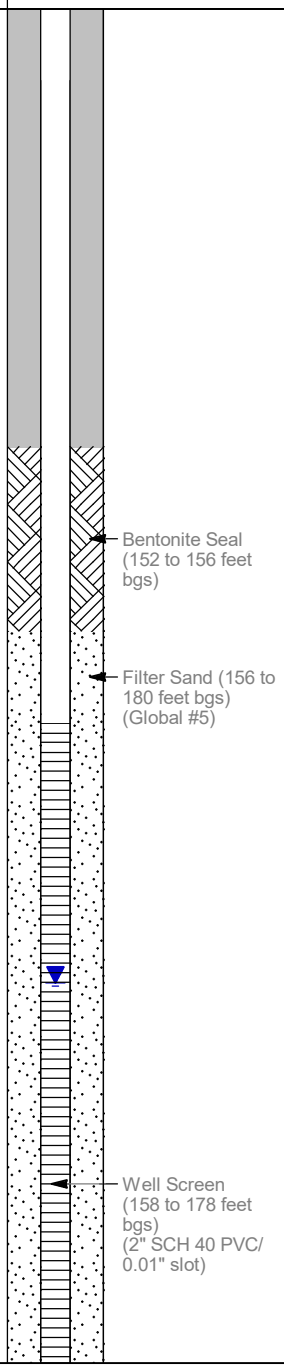
DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION
145	595					
						Red, CLAYSTONE, greenish gray, massive, trace mica, slightly weathered, moderate strength, wet. *(continued)*
150	590					
155	585					155.0
		HQ	240	48.3		Blue Gray, SANDSTONE, fine grained, some mica, massive, fresh, strong, wet.
160	580					
						164.5
165	575					
						Red, CLAYSTONE, purple, bluish gray, massive, fresh, 60 degree fracture at 173', 90 degree (4") fracture at 175', strong, wet.
170	570					



SAMPLE TYPE

- Sonic Drilling (SC)
- HQ Wireline Rock Coring (HQ)

GRAPHIC LOG LEGEND

- Sandy Silt
- Well-graded Sand
- Claystone Interbedded Shale
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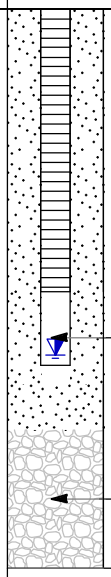
Project Name: RWL/FAR Monitoring Well Installation
Project Number: 0643653
Project Location: Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION
		HQ	96	61.5		Red, CLAYSTONE, purple, bluish gray, massive, fresh, 60 degree fracture at 173', 90 degree (4") fracture at 175', strong, wet. *(continued)*
175	565					
						176.0 — Red, CLAYSTONE, purple, bluish gray, massive, intensely weathered, strong, wet.
						177.0 — CLAYSTONE, purple, bluish-gray, orange, massive, slightly weathered, moderate strength, wet.
180	560	HQ	84	15.5		180.5 — Blue Gray, CLAYSTONE, purple, orange, massive, intensely weathered, very weak, wet.
						183.5
						184.0 — Light Gray, CLAYSTONE, intensely disintegrated, dry.
185	555					*Bottom of Boring @ 184.00 feet bgs*
190	550					
195	545					
200	540					

WELL DIAGRAM



SAMPLE TYPE

- Sonic Drilling (SC)
- HQ Wireline Rock Coring (HQ)

GRAPHIC LOG LEGEND

- Sandy Silt
- Well-graded Sand
- Claystone Interbedded Shale
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- Limestone
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2022-15

Client: Gavin Power, LLC
Project Name: RWL/FAR Monitoring Well Installation
Project Number: 0643653
Project Location: Cheshire, OH

DATE STARTED: 8/5/2022
DATE COMPLETED: 8/5/2022
DRILLING CONTRACTOR: Cascade Drilling
DRILLING METHODS: Sonic Drilling & Wireline Rock Coring
LOGGED BY: L. Stodden
CHECKED BY: A. Harford
NOTES: 6" Steel Stickup Protective Casing. 2016-08 replacement well.

TOTAL DEPTH: 195 feet bgs
DIAMETER: 6 inches
GROUND ELEVATION: 729.55
PVC ELEVATION: 732.09
NORTHING: 352451.0853
EASTING: 2068926.25

WELL DEVELOPMENT
METHOD(S): Mega Monsoon, Wattera, Bailer
DATE STARTED: 9/7/2022
DATE ENDED: 11/6/2022
DTW AT START: 22.16 feet bgs
DTW AT END: 190.66 feet bgs
VOLUME PURGED: 25.4 gallons

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION
		SC	23			Light Brown, CLAY, some silt and fine sand, roots, orange yellow mottling, poorly sorted, medium plasticity, dry to moist.
						3.0
5	725	SC	36			Light Brown, CLAY, some silt and fine to medium sand, red to orange yellow mottling, poorly sorted, medium plasticity, dry to moist.
						7.0
10	720	SC	48			Red Brown, CLAY, some silt and fine to medium sand, blue gray clay inclusions, yellow orange mottling, poorly sorted, medium plasticity, moist.
						11.5
						12.0 Gray Brown, CLAY, some silt and fine to medium sand, trace gravel, 0.5"-1" claystone fragments, thin medium to coarse dark gray sandy lenses, orange yellow mottling, poorly sorted, medium plasticity, dry to moist.
15	715	SC	40			Gray Brown, CLAY, some silt and fine to medium sand, trace gravel, 0.5"-1" claystone fragments, thin medium to coarse dark gray sandy lenses, orange yellow mottling, poorly sorted, medium plasticity, dry to moist.
						17.0
		SC	36			Red Brown, CLAY, some silt and fine to medium sand, blue gray clay inclusions, yellow orange mottling, poorly sorted, medium plasticity, moist.
						19.5
20	710					20.0 Dark Gray To Black, FINE TO MEDIUM SAND, some silt.

WELL DIAGRAM
Concrete Pad and 6" Steel Stickup Protective Casing

SAMPLE TYPE
- Sonic Drilling (SC)
- HQ Wireline Rock Coring (HQ)

GRAPHIC LOG LEGEND
- Clay
- Poorly-Graded Sand
- Claystone Interbedded Shale
- Siltstone
- Sandstone

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Client: Gavin Power, LLC
Project Name: RWL/FAR Monitoring Well Installation
Project Number: 0643653
Project Location: Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
						moderately sorted, loose, dry to moist.	
		SC	48			Brown To Red Brown, CLAY, some silt and fine sand, red bed layer at 21.5' to 22', varving, poorly sorted, low plasticity, dry. *(continued)*	
						24.0	
25	705	SC	36			Brown To Light Brown, CLAY, some silt and fine sand, mechanically crushed, varving, poorly sorted, low plasticity, dry.	
						27.0	
		SC	36			Red, CLAY, some subangular silt and fine sand, (1-3" diameter), gray-brown, gray shale rock fragments throughout, moderate gravel, yellow orange mottling, poorly sorted, medium plasticity, dense, moist.	
30	700					30.0	
		SC	55			Red Brown, CLAY, some subangular silt and fine sand, (1-3" diameter), gray shale rock fragments throughout, moderate gravel, yellow orange mottling, poorly sorted, medium plasticity, dense, moist.	
35	695					35.0	
		SC	24			Red Brown, CLAY, some subangular silt and fine sand, (1-3" diameter), gray shale and tan claystone rock fragments throughout, moderate gravel, yellow orange mottling, poorly sorted, medium plasticity, moist.	
						37.0	
40	690	HQ	28	92.9		Red Brown, CLAYSTONE, with clasts, gray-blue, few blue-gray fine grained sandstone clasts within claystone, thin layering in claystone, exterior moderately decomposed, moderate natural fractures, moderate cementation.	
						42.0	
						Red Brown, CLAYSTONE, with clasts, gray-blue, few blue-gray fine grained sandstone clasts within claystone, thin layering in claystone, exterior moderately decomposed, moderate natural fractures, moderate cementation.	

SAMPLE TYPE

- Sonic Drilling (SC)
- HQ Wireline Rock Coring (HQ)

GRAPHIC LOG LEGEND

- Clay
- Poorly-Graded Sand
- Claystone Interbedded Shale
- Siltstone
- Sandstone

ACRONYM LEGEND

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Client: Gavin Power, LLC
Project Name: RWL/FAR Monitoring Well Installation
Project Number: 0643653
Project Location: Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION
45	685	HQ	38	90.8		Red Brown, CLAYSTONE, with clasts, gray-blue, few blue-gray fine grained sandstone clasts within claystone, thin layering in claystone, exterior moderately decomposed, moderate natural fractures, moderate cementation. *(continued)*
						47.0
50	680	HQ	38	78.9		Red Brown, CLAYSTONE, with clasts, gray-blue, few blue gray fine grained sandstone clasts within claystone, thin layering in claystone, exterior moderately decomposed, moderate natural fractures, moderate cementation.
						52.0
55	675	HQ	36	63.9		Red Brown, CLAYSTONE, with clasts, gray-blue, few blue-gray fine grained sandstone clasts within claystone, thin layering in claystone, exterior moderately decomposed, moderate natural fractures, moderate cementation.
						57.0
						Dark Gray, CLAYSTONE, interbedded light gray to dark gray beds, flame structures, transitional zone, high cementation, hard.
						57.8
60	670	HQ	44	93.2		SILTSTONE, little rounded clasts, (<0.5" diameter), fine gravel, blue-olive-gray, graywacke, moderate natural fractures, yellow orange mottling, oxidized veins, moderate cementation.
						62.0
65	665	HQ	20	55		SILTSTONE, little rounded clasts, (<0.5" diameter), fine gravel, blue-olive-gray, graywacke, moderate natural fractures, yellow -orange to red-purple mottling, low cementation.

WELL DIAGRAM

- Bentonite Grout (0 to 80 feet bgs)
- Well Riser (0 to 182 feet bgs) (2" SCH 40 PVC)

SAMPLE TYPE

- Sonic Drilling (SC)
- HQ Wireline Rock Coring (HQ)

GRAPHIC LOG LEGEND

- Clay
- Poorly-Graded Sand
- Claystone Interbedded Shale
- Siltstone
- Sandstone

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Client: Gavin Power, LLC
Project Name: RWL/FAR Monitoring Well Installation
Project Number: 0643653
Project Location: Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
						SILTSTONE, little rounded clasts, (<0.5" diameter), fine gravel, blue-olive-gray, graywacke, moderate natural fractures, yellow -orange to red-purple mottling, low cementation. *(continued)*	
						69.0	
70	660	HQ	0			No recovery, washed out and fall out.	
						72.0	
75	655	HQ	40	76.3		Red Brown, CLAY, some silt and fine to medium sand, blue gray clay inclusions , tan-red bed from 76'-77', yellow orange mottling, poorly sorted, medium plasticity, moist.	
						77.0	
80	650	HQ	0			No Recovery.	
85	645	HQ	27	51.9		85.0	
						Red Brown, CLAY, some silt and fine to medium sand, 82'-85' washout/no recovery, blue gray clay inclusions, yellow orange mottling, poorly sorted, medium plasticity, moist.	
						85.5	
						Olive, SANDSTONE, blue-gray, calcareous, fine-medium grain sandstone, dispersed calcite crystallization, fine grained thin crossbedding throughout, high cementation, hard.	
						87.0	
90	640	HQ	11	100		No Recovery.	Well Riser

SAMPLE TYPE

- Sonic Drilling (SC)
- HQ Wireline Rock Coring (HQ)

GRAPHIC LOG LEGEND

- Clay
- Poorly-Graded Sand
- Claystone Interbedded Shale
- Siltstone
- Sandstone

ACRONYM LEGEND

amsl = above mean sea level
bgs = below ground surface
DTW = depth to water
NA = not applicable
NM = not measured
NR = no recovery
PVC = polyvinyl chloride

ERM
1 Beacon Street: 5th Floor
Boston, MA 02108
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Client: Gavin Power, LLC **Project Name:** RWL/FAR Monitoring Well Installation
Project Number: 0643653 **Project Location:** Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
						91.0 No Recovery. *(continued)*	(0 to 182 feet bgs) (2" SCH 40 PVC)
						Olive, SANDSTONE, blue-gray, calcareous, fine-medium grain sandstone, dispersed calcite crystallization, fine grained thin crossbedding throughout, high cementation, hard. 92.0	
		HQ	48	48.96		Olive, SANDSTONE, blue-gray, calcareous, fine-medium grain sandstone, dispersed calcite crystallization, fine grained thin crossbedding throughout, high cementation, hard. 94.0	
95	635					Red Brown, CLAY, some silt and fine to medium sand, blue gray clay inclusions, yellow orange mottling, poorly sorted, medium plasticity, moist. 95.5	
						Olive, SANDSTONE, blue-gray, calcareous, fine-medium grain sandstone, dispersed calcite crystallization, fine grained thin crossbedding throughout, high cementation, hard. 97.0	
100	630	HQ	40	73.5		Olive, SANDSTONE, blue-gray, calcareous, fine-medium grain sandstone, decrease in carbonate/increase in sand, fine to medium grained thin crossbedding throughout, high cementation, hard. 102.0	
105	625	HQ	50	56		Olive, SANDSTONE, with claystone, blue-gray, calcareous, fine-medium, decrease in carbonate/increase in sand, fine to medium grained thin crossbedding throughout, red brown claystone, high cementation, hard. 107.0	
110	620	HQ	0			No recovery. 112.0	
						Red Brown, CLAY, some silt and fine to medium sand, blue gray clay inclusions, yellow orange mottling, poorly sorted, medium plasticity, moist. 114.0	

SAMPLE TYPE

- Sonic Drilling (SC)
- HQ Wireline Rock Coring (HQ)

GRAPHIC LOG LEGEND

- Clay
- Poorly-Graded Sand
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DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION
115	615	HQ	41	60.98		Olive, SANDSTONE, with claystone, blue-gray, calcareous, fine-medium grain, decrease in carbonate/increase in sand, fine to medium grained thin crossbedding throughout, red brown claystone, high cementation, hard. *(continued)*
						117.0
120	610	HQ	51	68.6		Olive, SANDSTONE, with claystone, blue-gray, calcareous, fine-medium grain, Thick interbedding (Red claystone from 118.5' to 120.5'), carbonate veins, fine to medium grained thin crossbedding throughout, red brown claystone, high cementation, hard.
						122.0
125	605	HQ	34	79.4		Olive, SANDSTONE, with claystone, blue-gray, calcareous, fine-medium grain sandstone, thick interbedding (Red claystone from 122 to 122.5'), carbonate veins, fine to medium grained thin crossbedding throughout, red brown claystone, high cementation, hard.
						125.0
		HQ	43	47.7		Red Brown, CLAYSTONE, interbedded with fine sand, dark brown, highly decomposed/ weathered, medium cementation.
						126.5
						Olive, SANDSTONE, blue-gray, calcareous, thin layering, increasing sand content with depth, fine-medium grained crossbedding, pyrite nodules, moderate fracturing, medium cementation.
						129.0
130	600	HQ	45	48.9		Olive, SANDSTONE, with claystone, blue-gray, calcareous, thin layering, increasing carbonate content with depth, fine-medium grained crossbedding, pyrite nodules, (Red claystone from 133' to 134'), moderate fracturing, medium cementation.
						134.0
135	595	HQ	32	32.8		Red Brown, CLAYSTONE, rubble zone from 136' to 137' with increased sand content, yellow orange to purple mottling, low cementation.
						137.0
						No Recovery.

WELL DIAGRAM: Bentonite Chips (80 to 176 feet bgs)

SAMPLE TYPE

- Sonic Drilling (SC)
- HQ Wireline Rock Coring (HQ)

GRAPHIC LOG LEGEND

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Project Location: Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION
140	590	HQ	0			No Recovery. *(continued)*
						142.0
145	585	HQ	35	84.3		Red Brown, CLAYSTONE, gray-brown, moderate natural fracturing, yellow-tan-orange mottling, moderate cementation, hard.
						147.0
150	580	HQ	60	90		Red Brown, CLAYSTONE, gray-brown, moderate natural fracturing, thin fine-medium grained sandstone crossbeds, yellow-tan-orange mottling, moderate cementation, hard.
						152.0
155	575	HQ	40	62.5		Red Brown, CLAYSTONE, gray-brown, moderate natural fracturing, thin fine-medium grained sandstone crossbeds, blue-gray sandstone clasts, yellow tan orange mottling, moderate cementation, hard.
						157.0
160	570					No Recovery.

WELL DIAGRAM

SAMPLE TYPE

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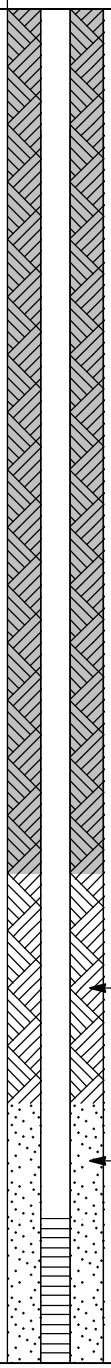
DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION
165	565	HQ	0			No Recovery. *(continued)*
						167.0
170	560	HQ	46	91.3		Red Brown, CLAYSTONE, moderate natural fracturing, thin fine-medium grained sand and silt lenses, yellow orange to purple mottling, moderate cementation, moderately decomposed/weathered.
						172.0
175	555	HQ	28	91.1		Red Brown, CLAYSTONE, moderate natural fracturing, thin fine-medium grained sand and silt lenses, yellow orange to purple mottling, moderate cementation, moderately decomposed/weathered.
						177.0
180	550	HQ	60	60		Red Brown, CLAYSTONE, moderate natural fracturing, thin fine-medium grained sand and silt lenses, yellow orange to purple mottling, moderate cementation, moderately decomposed/weathered.
						182.0
						Olive, SANDSTONE, blue-gray, calcareous, thin layering (brittle), increasing clay content with depth, very fine-fine grained crossbedding, moderate fracturing, medium cementation. [Cow Run Sandstone]

WELL DIAGRAM



SAMPLE TYPE

- Sonic Drilling (SC)
- HQ Wireline Rock Coring (HQ)

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DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
185	545	HQ	43	74.4		Olive, SANDSTONE, blue-gray, calcareous, thin layering (brittle), increasing clay content with depth, very fine-fine grained crossbedding, moderate fracturing, medium cementation. [Cow Run Sandstone] *(continued)*	Well Screen (182 to 192 feet bgs) (2" SCH 40 PVC/ 0.01" slot)
						189.0	
190	540	HQ	42	55.95		Olive, SANDSTONE, blue-gray, calcareous, thin layering (brittle), increasing clay content with depth, very fine-fine grained crossbedding, moderate fracturing, medium cementation. [Cow Run Sandstone]	Sump (2" SCH 40 PVC/2' long) (192 to 194 feet bgs)
195	535					195.0	
						Bottom of Boring @ 195.00 feet bgs	
200	530						
205	525						

SAMPLE TYPE

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2022-16

Client: Gavin Power, LLC
Project Name: RWL/FAR Monitoring Well Installation
Project Number: 0643653
Project Location: Cheshire, OH

DATE STARTED: 8/7/2022
DATE COMPLETED: 8/9/2022
DRILLING CONTRACTOR: Cascade Drilling
DRILLING METHODS: Sonic Drilling & Wireline Rock Coring
LOGGED BY: L. Stodden
CHECKED BY: A. Harford
NOTES: 6" Steel Stickup Protective Casing. 2019-09 replacement well.

TOTAL DEPTH: 189 feet bgs
DIAMETER: 6 inches
GROUND ELEVATION: 736.19
PVC ELEVATION: 738.37
NORTHING: 353206.6888
EASTING: 2064228.927

WELL DEVELOPMENT
METHOD(S): Mega Monsoon & Bailer
DATE STARTED: 9/7/2022
DATE ENDED: 11/6/2022
DTW AT START: 124.95 feet bgs
DTW AT END: 187.0 feet bgs
VOLUME PURGED: 12.25 gallons

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION
5	731	SC	84			Brown, CLAYEY SILT, with fine to medium sand, tan, trace organic lenses, gray mottling, overburden, poorly sorted, low plasticity, damp.
7.0						
10	726	SC	120			Brown, CLAY, with fine sand and silt, tan, little organic lenses, gray mottling, overburden, medium, moderate plasticity, denser with depth, damp.
15	721					
17.0						
		SC	12			Brown, CLAY, with fine sand and silt, tan, little organic lenses, gray mottling, overburden, medium, moderate plasticity, dense, damp.
18.0						
20	716					Red Brown, CLAYSTONE, with clasts of fine grained sandstone, highly decomposed to appear as more clay than claystone, yellow orange mottling, medium cementation.

WELL DIAGRAM
Concrete Pad and 6" Steel Stickup Protective Casing

SAMPLE TYPE
- Sonic Drilling (SC)
- HQ Wireline Rock Coring (HQ)

GRAPHIC LOG LEGEND
- Silt
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DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
		HQ	48	41.7		Red Brown, CLAYSTONE, with clasts of fine grained sandstone, highly decomposed to appear as more clay than claystone, yellow orange mottling, medium cementation. *(continued)*	
						22.0	
		HQ	24	0		Brown, SANDSTONE, tan, thin crossbedding throughout, lithics and micas, very fine to fine grained, orange-dark brown oxidation along natural fractures, rubble zone, medium cementation.	
						24.0	
25	711	HQ	36	50		Brown, SANDSTONE, tan, thin crossbedding throughout, lithics and micas, very fine to fine grained, orange-dark brown oxidation along natural fractures, rubble zone, medium cementation.	
						25.5	
						Red Brown, CLAYSTONE, fine grain tan sandstone clasts, highly decomposed to appear as more clay than claystone, yellow orange mottling, medium cementation.	
						27.0	
		HQ	36	51.4		Red Brown, CLAYSTONE, with fine grained olive-blue-gray sandstone clasts, Moderately decomposed, yellow orange mottling, medium cementation.	
						29.0	
30	706					Olive, SILTSTONE, with clay, blue-gray, Moderately decomposed, fissile, medium cementation.	
						30.0	
						Red Brown, CLAYSTONE, with fine grained olive-blue-gray sandstone clasts, moderately decomposed, yellow orange mottling, medium cementation.	
						31.0	
		HQ	34	89.7		Olive, SHALE, some silt, blue-gray, moderately decomposed, fissile, red claystone clasts, medium cementation.	
						32.0	
						Red Brown, CLAYSTONE, fine grained olive-blue-gray sandstone clasts, moderately decomposed, yellow orange mottling, medium cementation.	
						33.0	
35	701	HQ	48	76		Red Brown, CLAYSTONE, with fine grained olive-blue-gray sandstone clasts, moderately decomposed (increased weathering with depth), (olive/blue-gray sandstone bed from 34.5' to 35'), yellow orange mottling, medium cementation.	
						38.0	
40	696					No Recovery.	

SAMPLE TYPE

- Sonic Drilling (SC)
- HQ Wireline Rock Coring (HQ)

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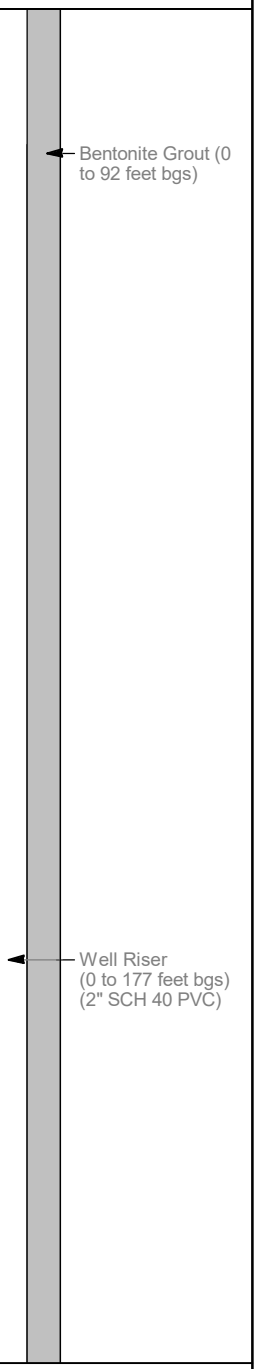
DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION
45	691	HQ	0			No Recovery. *(continued)*
50	686					53.0
		HQ	48	33.3		Olive, SHALE, some silt, blue-gray, highly decomposed, fissile, medium cementation.
55	681					54.0 Light Gray, CLAYSTONE, with red brown claystone clasts, highly decomposed, yellow orange to purple mottling, low cementation. 55.0
						Red Brown, CLAYSTONE, with fine grained olive-blue-gray sandstone clasts, highly decomposed to appear as more clay than claystone, yellow orange mottling, medium cementation.
60	676					57.0
		HQ	0			No recovery.
65	671					

WELL DIAGRAM



SAMPLE TYPE

- Sonic Drilling (SC)
- HQ Wireline Rock Coring (HQ)

GRAPHIC LOG LEGEND

- Silt
- Clay
- Claystone Interbedded Shale
- Sandstone
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DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
						No recovery. *(continued)*	
70	666					70.0	
		HQ	44	77.3		Red Brown, CLAYSTONE, fine grained olive-blue-gray sandstone clasts, highly decomposed, highly fractured, yellow orange to purple mottling, low cementation.	
						74.0	
75	661					Red Brown, CLAYSTONE, fine grained olive-blue-gray sandstone clasts, highly decomposed, highly fractured, yellow orange to purple mottling, low cementation.	
		HQ	36	52.8		75.5	
						Olive, SANDSTONE, blue-gray, fine-medium grained, micaceous, thin carbonate vein, moderately fractured, high cementation, hard.	
						77.0	
80	656	HQ	60	81.7		Olive, SANDSTONE, with silty clay, blue-gray, increasing silt-clay with depth, fine-medium grained, micaceous, (pyritic at 80-82ft), thin carbonate nodules, fine grained cross-beds, (fissile with depth), moderately fractured, high cementation, hard.	
						82.0	
						Red Brown, CLAYSTONE, with fine grained olive-blue-gray sandstone clasts, highly decomposed, highly fractured, low cementation.	
		HQ	46	70.7		84.0	
85	651					Olive, SANDSTONE, blue-gray, fine-medium grained, micaceous, pyritic, thin carbonate nodules, fine grained cross-beds, (fissile with depth), moderately fractured, high cementation, hard.	
						86.0	
		HQ	46	22.8		Olive, SANDSTONE, blue-gray, fine-medium grained, micaceous, pyritic, thin carbonate nodules, fin-medium grained cross-beds, highly fractured, high cementation, hard.	Well Riser (0 to 177 feet bgs) (2" SCH 40 PVC)
90	646					90.0	

SAMPLE TYPE

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- HQ Wireline Rock Coring (HQ)

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DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION
						91.0 Olive, SANDSTONE, blue-gray, fine grained, micaceous, pyritic, fine grained cross-beds, fissile layering, moderately fractured, moderate silt-clay content, high cementation, hard. *(continued)*
		HQ	30	48.3		Red Brown, CLAYSTONE, with fine grained olive-blue-gray sandstone clasts, highly decomposed, highly fractured, low cementation.
						93.0
95	641	HQ	24	41.7		Red Brown, CLAYSTONE, highly decomposed to appear as more clay than claystone, yellow orange mottling, low cementation.
						96.0
						Red Brown, CLAYSTONE, highly decomposed to appear as more clay than claystone, yellow orange mottling, low cementation.
						97.0
		HQ	45	54.4		Olive, SANDSTONE, blue-gray, fine grained, micaceous, fissile layering, moderately fractured, moderate silt-clay content, high cementation, hard.
100	636					
						101.0
		HQ	42	57.1		Olive, SANDSTONE, blue-gray, fine grained, micaceous, interbedded fine grained cross-beds and fissile silty clay beds, moderately fractured, moderate silt-clay content, high cementation, hard.
105	631					
						105.0
		HQ	24	37.5		Olive, SANDSTONE, blue-gray, fine to medium grained, micaceous, pyritic, fine to medium grained cross beds, moderately fractured, high cementation, hard.
						107.0
		HQ	45	84.4		Olive, SANDSTONE, blue-gray, fine to medium grained, micaceous, pyritic, fine to medium grained cross-beds transition to fissile silt-clay layers with depth, moderately fractured, moderate silt-clay content, high cementation, hard.
110	626					
						112.0
						Olive, SANDSTONE, blue-gray, fine grained, micaceous, fissile layering, moderately fractured, moderate silt-clay content, high cementation, hard.

WELL DIAGRAM

Bentonite Chips (92 to 122 feet bgs)

SAMPLE TYPE

- Sonic Drilling (SC)
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GRAPHIC LOG LEGEND

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Project Location: Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION
115	621	HQ	34	89.7		Olive, SANDSTONE, blue-gray, fine grained, micaceous, fissile layering, moderately fractured, moderate silt-clay content, high cementation, hard. *(continued)*
						117.0
		HQ	36	37.5		Olive, SHALE, some silt to fine sand, blue-gray, highly decomposed, fissile, pyritic, thin carbonate nodules (interbedded red claystone from 119.5-120' Bgs), medium cementation.
120	616					120.0
						Olive, SHALE, some silt to fine sand, medium cementation, highly decomposed, fissile, pyritic, thin carbonate nodules (interbedded red claystone from 119.5' to 120').
						121.0
		HQ	48	75		Gray, SILTSTONE, transitional zone, carbonate nodules (0.2-0.5" diameter), medium cementation.
						123.5
125	611					Red Brown, CLAYSTONE, highly decomposed, yellow orange to purple mottling, medium cementation.
						125.0
		HQ	38	56.6		Red Brown, CLAYSTONE, highly decomposed, moderately fractured, yellow orange to purple mottling, medium cementation.
130	606					130.0
		HQ	60	57.5		Red Brown, CLAYSTONE, with beds of olive-blue-gray silty claystone, highly decomposed, moderate fracturing, rubble zones present at 130-131' bgs and 136-138' bgs, yellow orange to purple mottling, low cementation.
135	601					

WELL DIAGRAM

SAMPLE TYPE

- Sonic Drilling (SC)
- HQ Wireline Rock Coring (HQ)

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Project Number: 0643653
Project Location: Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION
						138.0
140	596	HQ	23	95.7		Red Brown, CLAYSTONE, with clasts, tan claystone, highly decomposed, yellow orange to purple mottling, low cementation.
						143.0
						Red Brown, CLAYSTONE, with clasts, tan claystone, moderately decomposed, yellow orange to purple mottling, low cementation.
						144.5
145	591	HQ	47	90.4		Olive, SHALE, some some silt to fine sand, blue-gray, thin carbonate veins, alternating light brown fine grained sand and dark gray silt beds, medium cementation.
						148.0
						148.5 Red Brown, CLAYSTONE, with clasts, tan claystone, moderately decomposed, yellow orange to purple mottling, low cementation.
						Olive, SHALE, some some silt to fine sand, blue-gray, thin carbonate veins, alternating light brown fine grained sand and dark gray silt beds, medium
						149.5 cementation.
150	586	HQ	45	57.8		Gray, SILTSTONE, moderate carbonate nodules (0.2-0.5" diameter), moderately decomposed, moderately fractured, medium cementation.
						153.0
155	581	HQ	40	16.3		Gray, SILTSTONE, moderate carbonate nodules (0.2-0.5" diameter), moderately decomposed, moderately fractured, medium cementation.
						158.0
160	576	HQ	40	67.5		Gray, SILTSTONE, moderate carbonate nodules (0.2-0.5" diameter), moderately decomposed, moderately fractured, yellow orange-red purple mottling, medium cementation.

WELL DIAGRAM: ← Bentonite Grout (122 to 171 feet bgs)

SAMPLE TYPE

- Sonic Drilling (SC)
- HQ Wireline Rock Coring (HQ)

GRAPHIC LOG LEGEND

- Silt
- Clay
- Claystone Interbedded Shale
- Sandstone
- Siltstone
- Shale

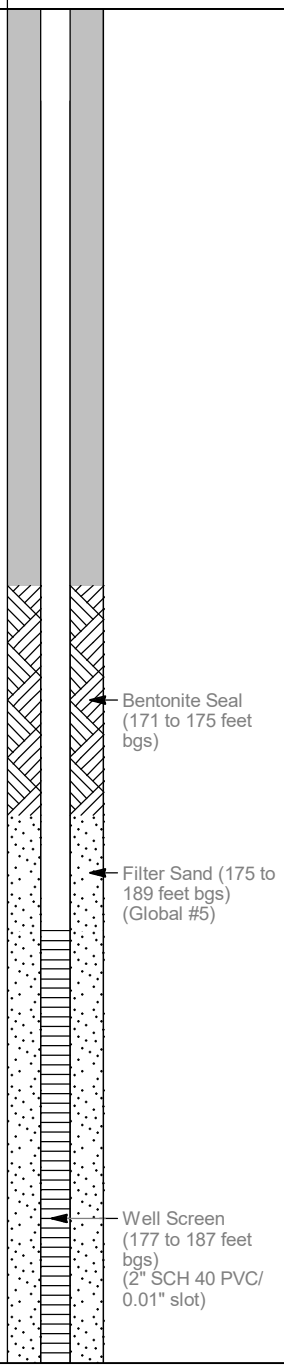
ACRONYM LEGEND

amsl = above mean sea level
bgs = below ground surface
DTW = depth to water
NA = not applicable
NM = not measured
NR = no recovery
PVC = polyvinyl chloride

ERM
1 Beacon Street: 5th Floor
Boston, MA 02108
Telephone: + 1 (617) 646-7800

Client: Gavin Power, LLC
Project Name: RWL/FAR Monitoring Well Installation
Project Number: 0643653
Project Location: Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION
						Gray, SILTSTONE, moderate carbonate nodules (0.2-0.5" diameter), moderately decomposed, moderately fractured, yellow orange-red purple mottling, medium cementation. *(continued)*
						163.0
165	571	HQ	36	79.2		Gray, SILTSTONE, moderate carbonate nodules (0.2-0.5" diameter), moderately decomposed, moderately fractured, yellow orange-red purple mottling, medium cementation.
						168.0
						Gray, SILTSTONE, moderate carbonate nodules (0.2-0.5" diameter), moderately decomposed, moderately fractured, medium cementation.
170	566	HQ	51	54.9		170.0
						Olive, SILTSTONE, some fine sand, blue-gray, little carbonate nodules (0.2-0.5" diameter), moderately decomposed, moderately fractured, medium cementation.
						173.0
175	561	HQ	24	100		Olive, SANDSTONE, some silt, blue-gray, fine grained, micaceous, little carbonate nodules (0.2-0.5" diameter), increasing sand content with depth, natural fracture (165-170 degrees), high cementation, hard. [Cow Run Sandstone]
						177.0
180	556	HQ	46	95.7		Olive, SANDSTONE, blue-gray, fine to medium grained, micaceous, little fine grained cross-beds, thin carbonate veins (<0.5" diameter) carbonate nodules, moderately fractured (165-170 degrees), high cementation, hard. [Cow Run Sandstone]
						182.0
						Olive, SANDSTONE, blue-gray, fine to medium grained, micaceous, fine to medium grained cross-beds, moderately fractured (155-165 degrees), high cementation, hard. [Cow Run Sandstone]



SAMPLE TYPE

- Sonic Drilling (SC)
- HQ Wireline Rock Coring (HQ)

GRAPHIC LOG LEGEND

- Silt
- Clay
- Claystone Interbedded Shale
- Sandstone
- Siltstone
- Shale

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Client: Gavin Power, LLC
Project Name: RWL/FAR Monitoring Well Installation
Project Number: 0643653
Project Location: Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
185	551	HQ	52	78.8		Olive, SANDSTONE, blue-gray, fine to medium grained, micaceous, fine to medium grained cross-beds, moderately fractured (155-165 degrees), high cementation, hard. [Cow Run Sandstone] *(continued)*	Sump (2" SCH 40 PVC/2' long) (187 to 189 feet bgs)
						189.0	
190	546					*Bottom of Boring @ 189.00 feet bgs*	
195	541						
200	536						
205	531						

SAMPLE TYPE

- Sonic Drilling (SC)
- HQ Wireline Rock Coring (HQ)

GRAPHIC LOG LEGEND

- Silt
- Clay
- Claystone Interbedded Shale
- Sandstone
- Siltstone
- Shale

ACRONYM LEGEND

amsl = above mean sea level
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2022-17

Client: Gavin Power, LLC
Project Name: RWL/FAR Monitoring Well Installation
Project Number: 0643653
Project Location: Cheshire, OH

DATE STARTED: 9/13/2022
DATE COMPLETED:
DRILLING CONTRACTOR: Cascade Drilling
DRILLING METHODS: Wireline Rock Coring
LOGGED BY: J. Maag
CHECKED BY: A. Harford
NOTES: 6" Steel Stickup Protective Casing. 2018-01 replacement well.

TOTAL DEPTH: 258 feet bgs
DIAMETER: 6 inches
GROUND ELEVATION: 733.39
PVC ELEVATION: 735.83
NORTHING: 345353.3472
EASTING: 2072913.835

WELL DEVELOPMENT
METHOD(S): Wattera
DATE STARTED: 10/5/2022
DATE ENDED: 10/5/2022
DTW AT START: 78.96 feet bgs
DTW AT END: 248.26 feet bgs
VOLUME PURGED: 36 gallons

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION
						Gray Brown, SILT, soft, orange mottling, with coarse black shale pieces, low plasticity, wet.
						1.0
						Gray Brown, SILTSTONE, little mica, dark gray, orange, massive, slightly disintegrated, very weathered, with fine black shale pieces, very weak, dry.
						3.0
		HQ	84			
5	728					Dark Gray, SILTSTONE, interbedded shale, some mica, massive, weak, very weathered, wet.
						6.0
10	723					Gray Brown, CLAYSTONE, trace mica, orange, yellow. black, gray, massive, slightly weathered, very weak, wet.
		HQ	120	62.5		
15	718					15.0
						Yellow Brown, FINE SILTY SAND, with coarse gravel, orange mottling, some mica, trace organic matter (roots).
						17.0
						Yellow Brown, SILTSTONE, sandy, orange-red-gray mottling, trace organic matter (roots), little mica, massive, very weathered, very weak, wet.
20	713					

WELL DIAGRAM
Concrete Pad and 6" Steel Stickup Protective Casing

SAMPLE TYPE
- HQ Wireline Rock Coring (HQ)

GRAPHIC LOG LEGEND
- Silt
- Siltstone
- Claystone Interbedded Shale
- Silty Sand
- Shale
- Limestone

ACRONYM LEGEND
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PVC = polyvinyl chloride

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Client: Gavin Power, LLC
Project Name: RWL/FAR Monitoring Well Installation
Project Number: 0643653
Project Location: Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
25	708	HQ	204	0		Yellow Brown, SILTSTONE, sandy, orange-red-gray mottling, trace organic matter (roots), little mica, massive, very weathered, very weak, wet. *(continued)*	
						26.0	
						Dark Gray, SILTSTONE, little mica, orange-red-gray mottling, roots, massive, very weathered, very weak, wet.	
						29.0	
30	703					Gray, SHALE, very thinly laminated, moderately weathered, moderately disintegrated, moderately strong, dry.	
35	698						Bentonite Grout (0 to 72 feet bgs)
						37.0	
40	693					Gray, SHALE, very thinly laminated, moderately weathered, moderately strong, wet.	

SAMPLE TYPE

HQ Wireline Rock Coring (HQ)

GRAPHIC LOG LEGEND

Silt
Siltstone
Claystone Interbedded Shale
Silty Sand
Shale
Limestone

ACRONYM LEGEND

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Project Number: 0643653
Project Location: Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
45	688	HQ	168	44.6		Gray, SHALE, very thinly laminated, moderately weathered, moderately strong, wet. *(continued)*	
50	683						
55	678					55.5	
60	673					Gray, SILTSTONE, massive, slightly weathered, moderately strong, wet.	
65	668						

SAMPLE TYPE

HQ Wireline Rock Coring (HQ)

GRAPHIC LOG LEGEND

Silt
Siltstone
Claystone Interbedded Shale
Silty Sand
Shale
Limestone

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Project Number: 0643653
Project Location: Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION
		HQ	54	59.3		Gray, SILTSTONE, massive, slightly weathered, moderately strong, wet. *(continued)*
70	663					
						72.5 — Gray, LIMESTONE, fine grained veins of quartz and mica, very weathered, strong, wet. — 73.5
75	658					Bluish Gray, SANDSTONE, few mica, trace pyrite, massive, fine grained, strong, wet. — 76.5
						Bluish Gray, SHALE, few mica, purple-yellow, very thinly laminated, weak, moderately weathered, wet. — 79.5
80	653					Light Bluish Gray, SANDSTONE, few mica, fine grained, massive, strong, wet. — 83.0
85	648	HQ	228	55.3		Bluish Gray, CLAYSTONE, interbedded siltstone, purple-yellow, little mica, massive, weak, moderately weathered, wet. — 88.0
90	643					Red, CLAYSTONE, interbedded siltstone, purple-yellow blue-gray, little mica, massive, weak, moderately weathered, wet.

WELL DIAGRAM

SAMPLE TYPE

HQ Wireline Rock Coring (HQ)

GRAPHIC LOG LEGEND

Silt | Siltstone | Claystone Interbedded Shale
Silty Sand | Shale | Limestone

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DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
95	638					Red, CLAYSTONE, interbedded siltstone, purple-yellow blue-gray, little mica, massive, weak, moderately weathered, wet. *(continued)*	Bentonite Chips (72 to 114 feet bgs)
						97.0	
100	633					Bluish Gray, SILTSTONE, interbedded shale, purple-red, some mica, very thinly laminated, slightly weathered, moderately strong, wet.	
						101.5	
105	628	HQ	228	67.1		Red, CLAYSTONE, purple-red, blue gray, yellow, massive, weak, slightly weathered, wet.	
110	623						
						112.5	
						Red, CLAYSTONE, purple-red, blue gray, yellow, massive, weak, slightly weathered, wet.	

SAMPLE TYPE

HQ Wireline Rock Coring (HQ)

GRAPHIC LOG LEGEND

Silt
Siltstone
Claystone Interbedded Shale
Silty Sand
Shale
Limestone

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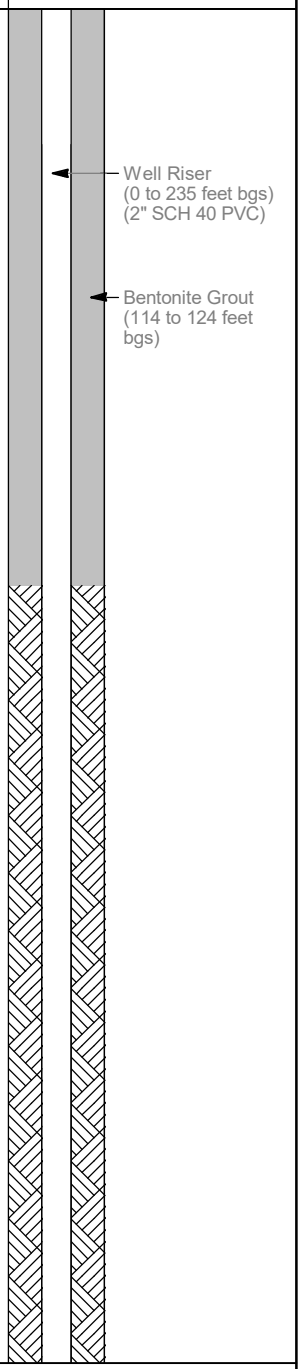
Project Number: 0643653
Project Location: Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION
115	618					
120	613					
125	608	HQ	162	66		Red, CLAYSTONE, purple-red, blue gray, yellow, massive, weak, slightly weathered, wet. *(continued)*
130	603					
135	598					

WELL DIAGRAM



SAMPLE TYPE

HQ Wireline Rock Coring (HQ)

GRAPHIC LOG LEGEND

Silt
Siltstone
Claystone
Interbedded Shale
Silty Sand
Shale
Limestone

ACRONYM LEGEND

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Project Number: 0643653
Project Location: Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
140	593					Red, CLAYSTONE, purple-red, blue gray, yellow, massive, weak, slightly weathered, wet. *(continued)*	
145	588	HQ	120	72.5			
						148.5	
150	583					Bluish Gray, SANDSTONE, few mica, purple-red, fine grained, massive, strong, wet.	
						150.5	Bentonite Chips (124 to 178 feet bgs)
155	578					Red, CLAYSTONE, trace mica, purple-red, massive, slightly weathered, moderately strong, wet.	
160	573						

SAMPLE TYPE

HQ Wireline Rock Coring (HQ)

GRAPHIC LOG LEGEND

Silt
Siltstone
Claystone
Interbedded Shale
Silty Sand
Shale
Limestone

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Project Number: 0643653
Project Location: Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
						161.5	
						Bluish Gray, SILTSTONE, interbedded shale, purplish-red staining, trace pyrite, few mica, very thinly laminated, moderately weathered, moderately strong, wet.	
165	568						
						166.5	
		HQ	216	58.3		Red, CLAYSTONE, purple-red, bluish-gray, massive, slightly weathered, moderately strong, wet.	
						169.5	
170	563						
						Bluish Gray, SILTSTONE, interbedded sandstone, fine grained, little pyrite, trace mica, massive, slightly weathered, moderately strong, wet.	
175	558						
						177.0	
180	553					Red, CLAYSTONE, purple-red, blue -gray, yellow, massive, slightly weathered, moderately strong, wet.	

SAMPLE TYPE

HQ Wireline Rock Coring (HQ)

GRAPHIC LOG LEGEND

Silt
Siltstone
Claystone Interbedded Shale
Silty Sand
Shale
Limestone

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Project Number: 0643653
Project Location: Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
185	548	HQ	186	63.98		Red, CLAYSTONE, purple-red, blue -gray, yellow, massive, slightly weathered, moderately strong, wet. *(continued)*	
190	543						
195	538						
200	533						
205	528	HQ	72	37.5			

Bentonite Grout (178 to 229)

SAMPLE TYPE

HQ Wireline Rock Coring (HQ)

GRAPHIC LOG LEGEND

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Siltstone
Claystone Interbedded Shale
Silty Sand
Shale
Limestone

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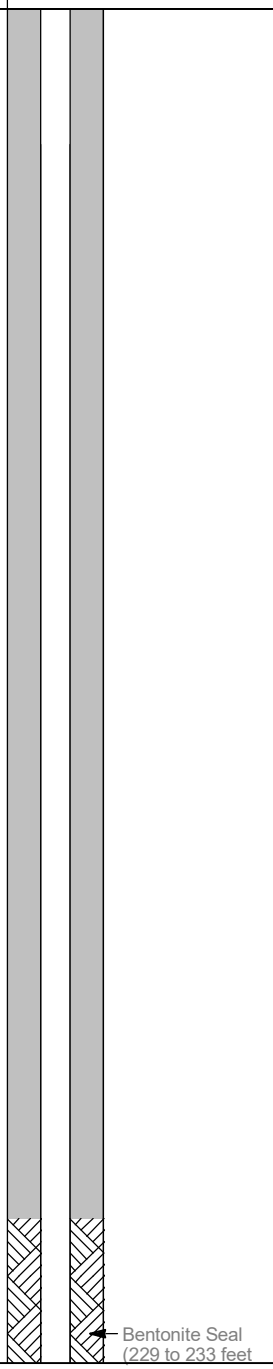
Client: Gavin Power, LLC
Project Name: RWL/FAR Monitoring Well Installation
Project Number: 0643653
Project Location: Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION
210	523					
215	518					
220	513					Red, CLAYSTONE, purple-red, blue -gray, yellow, massive, slightly weathered, moderately strong, wet. *(continued)*
225	508	HQ	222	32.4		
230	503					

WELL DIAGRAM



SAMPLE TYPE

HQ Wireline Rock Coring (HQ)

GRAPHIC LOG LEGEND

Silt
Siltstone
Claystone
Interbedded Shale
Silty Sand
Shale
Limestone

ACRONYM LEGEND

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Project Name: RWL/FAR Monitoring Well Installation
Project Number: 0643653
Project Location: Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
						Red, CLAYSTONE, purple-red, blue -gray, yellow, massive, slightly weathered, moderately strong, wet. *(continued)*	bgs)
235	498					234.5	Filter Sand (233 to 257 feet bgs) (Global #5)
240	493						
245	488	HQ	204	62.3		Bluish Gray, SANDSTONE, interbedded siltstone, fine grained, little mica, trace pyrite, massive, grades into dark gray, (45 degree) fracture at 237 ft, (10 degree) fracture at 240.5 ft, (180 degree) fracture at 243 ft, and (180 degree) fracture at 245.5 ft, wet. [Cow Run Sandstone]	Well Screen (235 to 255 feet bgs) (2" SCH 40 PVC/ 0.01" slot)
250	483						
255	478						

SAMPLE TYPE

HQ Wireline Rock Coring (HQ)

GRAPHIC LOG LEGEND

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Siltstone
Claystone Interbedded Shale
Silty Sand
Shale
Limestone

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Client: Gavin Power, LLC
Project Name: RWL/FAR Monitoring Well Installation
Project Number: 0643653
Project Location: Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
						Bluish Gray, SANDSTONE, interbedded siltstone, fine grained, little mica, trace pyrite, massive, grades into dark gray, (45 degree) fracture at 237 ft, (10 degree) fracture at 240.5 ft, (180 degree) fracture at 243 ft, and (180 degree) fracture at 245.5 ft, wet. [Cow Run Sandstone] *(continued)*	Sump (2" SCH 40 PVC/2' long) (255 to 257 feet bgs)
						257.0 Dark Gray, SHALE, bluish-gray, very thinly laminated, slightly weathered, moderately strong, wet.	
						258.0 *Bottom of Boring @ 258.00 feet bgs*	
260	473						
265	468						
270	463						
275	458						

SAMPLE TYPE

HQ Wireline Rock Coring (HQ)

GRAPHIC LOG LEGEND

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Silty Sand | Shale | Limestone

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2022-18

Client: Gavin Power, LLC
Project Name: RWL/FAR Monitoring Well Installation
Project Number: 0643653
Project Location: Cheshire, OH

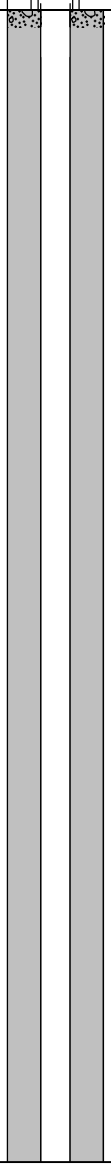
DATE STARTED: 8/11/2022
DATE COMPLETED: 8/18/2022
DRILLING CONTRACTOR: Cascade Drilling
DRILLING METHODS: Sonic Drilling & Wireline Rock Coring
LOGGED BY: L. Stodden
CHECKED BY: A. Harford
NOTES: 6" Steel Stickup Protective Casing. 96156 replacement well.

TOTAL DEPTH: 223 feet bgs
DIAMETER: 6 inches
GROUND ELEVATION: 852.04
PVC ELEVATION: 854.41
NORTHING: 352327.0836
EASTING: 2061913.471

WELL DEVELOPMENT
METHOD(S): Mega Monsoon & Bailer
DATE STARTED: 9/7/2022
DATE ENDED: 11/6/2022
DTW AT START: 128.19 feet bgs
DTW AT END: 211.0 feet bgs
VOLUME PURGED: 21.25 gallons

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION
		SC	36			Brown, CLAYSTONE, little silt, tan, orange mottling, thin organic lenses, moderate, moderate plasticity.
						3.0
5	847	HQ	48	0		Brown, SANDSTONE, some silt, tan, orange-red mottling, fine grained rubble zone, low cementation.
						7.0
10	842	HQ	120	6.7		Brown, SANDSTONE, some silt, tan, fine grained rubble zone, highly layered, moderate cementation.
						12.0
						Light Gray, SANDSTONE, some silt, very fine to fine grained rubble zone, highly layered, moderate cementation.
						13.0
15	837					Light Brown, SANDSTONE, fine to coarse grained, highly cross bedded (alternating lithic beds), highly micaceous, moderate cementation.
						17.0
						Light Brown, SANDSTONE, interbedded sandstone, fine to coarse grained, highly cross bedded (alternating lithic beds), alternating light gray, highly micaceous, moderately natural fractured (along bedding planes 165-170 degrees), moderate cementation.
						18.0
20	832	HQ	36	27.8		Light Gray, SANDSTONE, fine to coarse grained, highly cross bedded (alternating lithic beds), highly micaceous, moderately natural fractured (along bedding planes 165-170 degrees), high cementation.

WELL DIAGRAM



SAMPLE TYPE

- Sonic Drilling (SC)
- HQ Wireline Rock Coring (HQ)

GRAPHIC LOG LEGEND

- Claystone Interbedded Shale
- Sandstone
- Coal
- Shale
- Siltstone
- Limestone

ACRONYM LEGEND

amsl = above mean sea level
bgs = below ground surface
DTW = depth to water
NA = not applicable
NM = not measured
NR = no recovery
PVC = polyvinyl chloride

ERM
1 Beacon Street: 5th Floor
Boston, MA 02108
Telephone: + 1 (617) 646-7800

Client: Gavin Power, LLC
Project Name: RWL/FAR Monitoring Well Installation
Project Number: 0643653
Project Location: Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
						Light Gray, SANDSTONE, fine to coarse grained, highly cross bedded (alternating lithic beds), highly micaceous, moderately natural fractured (along bedding planes 165-170 degrees), high cementation. *(continued)*	
						21.0	
		HQ	43	55.8		Light Gray, SANDSTONE, fine to coarse grained, highly cross bedded (alternating lithic beds), highly micaceous, moderately natural fractured (along bedding planes 165-170 degrees), high cementation.	
25	827					25.0	
		HQ	55	43.6		Light Gray, SANDSTONE, thin sandstone beds (0.5-1"), fine to coarse grained, highly cross bedded (alternating lithic beds), interbedded tan-brown coarse grained sandstone, highly micaceous, moderately natural fractured (along bedding planes 165-170 degrees), high cementation.	
30	822					30.0	
		HQ	48	46.9		Light Gray, SANDSTONE, thick sandstone beds (10-12"), fine to coarse grained, highly cross bedded (alternating lithic beds), interbedded tan-brown coarse grained sandstone, highly micaceous, moderately natural fractured, (along bedding planes 150-160 degrees), high cementation.	← Bentonite Grout (0 to 62 feet bgs)
						34.0	
35	817	HQ	34	0		Brown, SANDSTONE, tan, medium to coarse grained, highly cross bedded (alternating lithic beds), highly micaceous, moderately natural fractured/weathered (along bedding planes 150-160 degrees), moderate cementation.	
						37.0	
40	812					No Recovery/Washout.	

SAMPLE TYPE

- Sonic Drilling (SC)
- HQ Wireline Rock Coring (HQ)

GRAPHIC LOG LEGEND

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- Shale
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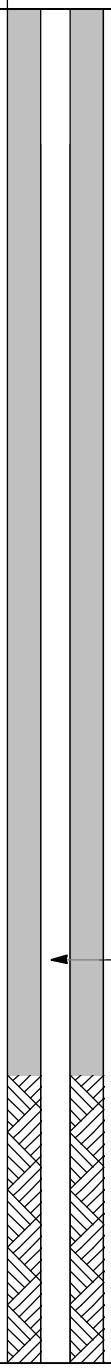
DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION
45	807	HQ	0			
50	802					No Recovery/Washout. *(continued)*
55	797					56.0
		HQ	15	0		Brown, SANDSTONE, tan, medium to coarse grained, highly cross bedded (alternating lithic beds), interbedded light gray fine to medium grained sandstone, highly micaceous, highly decomposed, low cementation. 57.0
60	792					No Recovery/Washout.
65	787	HQ	0			

WELL DIAGRAM



SAMPLE TYPE

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- HQ Wireline Rock Coring (HQ)

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DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
70	782					No Recovery/Washout. *(continued)*	
75	777						
		HQ	12	37.5		76.0 Brown, SANDSTONE, tan, medium to coarse grained, highly cross bedded (alternating lithic beds), interbedded light gray fine to medium grained sandstone, highly micaceous, highly decomposed, low cementation. 77.0	Bentonite Chips (62 to 91 feet bgs)
						Black, COAL, rubble zone, low density, possibly bituminous. 79.0	
80	772						
		HQ	72	24.3		Gray, SHALE, sandstone (1' thick), alternating light to dark gray beds, interbedded light gray fine grained cross bedded sandstone, few thin pyritic lenses occur with depth, moderate cementation.	
85	767						
						87.0 Gray, SHALE, few alternating light to dark gray beds with depth, moderate cementation.	
90	762						

SAMPLE TYPE

- Sonic Drilling (SC)
- HQ Wireline Rock Coring (HQ)

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DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION
		HQ	73	35.6		Gray, SHALE, few alternating light to dark gray beds with depth, moderate cementation. *(continued)*
95	757					
						97.0 — Dark Gray, CLAYSTONE, rubble zone, moderate cementation.
						98.5
100	752	HQ	72	34		Light Bluish Gray, CLAYSTONE, some medium to coarse sand and gravel, carbonate inclusions (<0.5"), few thin pyrite lenses, fine grained gravel, moderately fractured, moderate cementation.
105	747					107.0 — Light Bluish Gray, CLAYSTONE, some medium to coarse sand and gravel, carbonate inclusions (<0.5"), few thin pyrite lenses, fine grained gravel, moderately fractured, moderate cementation.
						108.0
110	742	HQ	86	60.5		Red to Black, CLAYSTONE, dark gray and purple, yellow orange mottling, red and black alternating beds from 108 to 110 and transitions to dark gray/ purple with yellow mottling 110 to 115, low cementation.

WELL DIAGRAM

Well Riser
(0 to 199 feet bgs)
(2" SCH 40 PVC)

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DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
115	737					Red to Black, CLAYSTONE, dark gray and purple, yellow orange mottling, red and black alternating beds from 108 to 110 and transitions to dark gray/ purple with yellow mottling 110 to 115, low cementation. *(continued)*	
						115.0	
						Blue to Green Gray, SANDSTONE, little silt to clay, slight yellow to purple mottling that decreases with depth, fine grained, micaceous, few thin pyrite lenses, faint thin dark to light gray bedding, high cementation, hard.	
						117.0	
						Blue to Green Gray, SANDSTONE, little silt to clay, fine grained, micaceous, few thin pyrite lenses, faint thin dark to light gray bedding, high cementation, hard.	
						118.0	
120	732	HQ	94	76.1		Blue Gray, CLAYSTONE, some fine sand and silt, yellow - orange to red - purple mottling, layered, moderately fractured, slightly decomposed, moderate cementation.	
						123.0	
125	727					Blue to Green Gray, SANDSTONE, fine to medium grained, alternating carbonate beds and fine grained cross beds, micaceous, calcareous, high cementation, hard.	
						127.0	
130	722	HQ	120	57.9		Blue to Green Gray, SANDSTONE, fine to medium grained, alternating carbonate beds and fine grained cross beds, micaceous, calcareous, high cementation, hard.	
135	717					136.0	
						Red Brown, CLAYSTONE, some fine sand and silt, slight yellow mottling, sharp contact at 136', partial rubble zone at base, low cementation.	
						137.0	

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DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
140	712	HQ	120	58.3		Red Brown, CLAYSTONE, yellow-orange mottling, interbedded olive-blue-gray micaceous sandstone, sandstone bed 1ft foot, sandstone clasts throughout claystone, high cementation. *(continued)*	Bentonite Grout (91 to 193 feet bgs)
						141.0	
						Red Brown, CLAYSTONE, yellow-orange to red-purple mottling, layered, moderately fractured, slightly decomposed, moderate cementation.	
145	707					145.0	
						Brown, CLAYSTONE, rubble zone, fragmented claystone rock within a clay/mud matrix, broken down to mud from drill, high plasticity.	
						146.0	
						Dark Gray, CLAYSTONE, rubble zone, fragmented claystone rock within a clay/mud matrix, broken down to mud from drill, low cementation.	
						147.0	
150	702	HQ	100	46		Green Gray, SILTSTONE, some coarse sand and fine gravel, yellow mottling, moderately fractured, moderate decomposition, moderate cementation, hard.	
						153.0	
155	697					Red Brown, CLAYSTONE, yellow and purple mottling, 155' to 157' highly weathered into a clay with rock fragments, low cementation.	
						157.0	
						Red Brown, CLAYSTONE, yellow and purple mottling, high mechanical weathering, low cementation.	
160	692						

SAMPLE TYPE

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- HQ Wireline Rock Coring (HQ)

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DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
		HQ	90	45		Red Brown, CLAYSTONE, yellow and purple mottling, high mechanical weathering, low cementation. *(continued)*	
165	687						
						167.0	
		HQ	108	44.9		Red Brown, CLAYSTONE, yellow and purple mottling, high mechanical weathering, low cementation.	
170	682						
175	677						
						177.0	
		HQ	102	59.3		Red Brown, CLAYSTONE, yellow and purple mottling, high mechanical weathering, low cementation.	
180	672						

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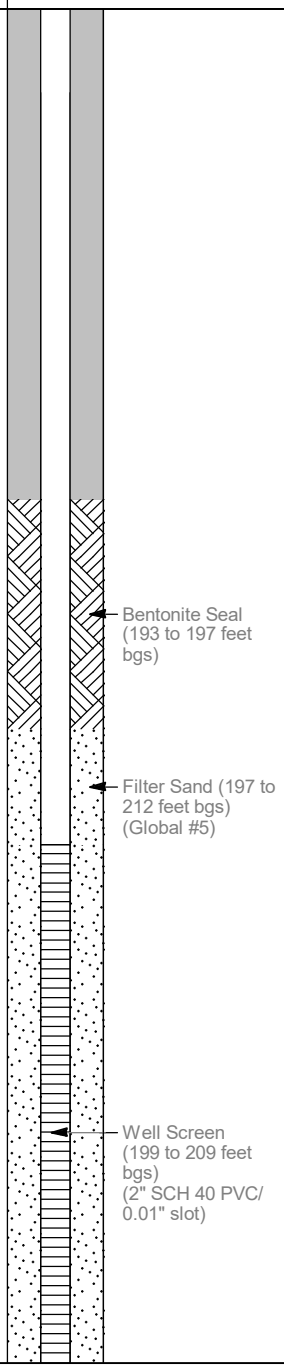
DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION
185	667					185.0
						Light Gray to Dark Gray, SANDSTONE, some silt and clay, very fine to fine grained, micaceous and pyritic, moderate cementation. [Morgantown Sandstone]
						187.0
190	662	HQ	120	77.5		Light Gray to Dark Gray, SANDSTONE, moderate natural fractures (160-170 degrees),fine to coarse grained, micaceous & pyritic, scouring/cross bedding/clasts (light gray, coarse grained) throughout, high cementation, hard. [Morgantown Sandstone]
195	657					197.0
200	652	HQ	120	73.3		Light Gray, SANDSTONE, moderate natural fractures (160-170 degrees), fine to coarse grained, micaceous & pyritic, interbedded dark gray siltstone beds, scouring/cross bedding/clasts (light gray, coarse grained) throughout, high cementation, hard. [Morgantown Sandstone]
205	647					207.0
						Light Gray, SANDSTONE, moderate natural fractures (160-170 degrees), fine to coarse grained, micaceous & pyritic, cross bedding (light gray, coarse grained) throughout, high cementation, hard. [Morgantown Sandstone]



SAMPLE TYPE

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- HQ Wireline Rock Coring (HQ)

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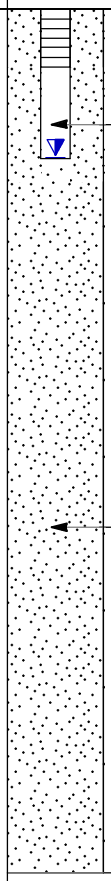
DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION
210	642	HQ	132	43.6		Light Gray, SANDSTONE, moderate natural fractures (160-170 degrees), fine to coarse grained, micaceous & pyritic, cross bedding (light gray, coarse grained) throughout, high cementation, hard. [Morgantown Sandstone] *(continued)*
						213.0
215	637					Dark Gray, LIMESTONE, moderate clay, highly weathered, moderate layers, carbonate, nodules(<0.5"), claystone and sandstone clasts (<0.5"), low cementation.
						217.0
						Light Gray, SANDSTONE, moderate natural fractures (160-170 degrees), fine to coarse grained, micaceous & pyritic, cross bedding (light gray, coarse grained) throughout, high cementation, hard.
220	632	HQ	36			220.0
						Dark Gray, SHALE, rubble zone, shale fragment mixed into rock flour mud, low cementation.
						223.0
						Bottom of Boring @ 223.00 feet bgs
225	627					
230	622					

WELL DIAGRAM



SAMPLE TYPE

- Sonic Drilling (SC)
- HQ Wireline Rock Coring (HQ)

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2022-19

Client: Gavin Power, LLC
Project Name: RWL/FAR Monitoring Well Installation
Project Number: 0643653
Project Location: Cheshire, OH

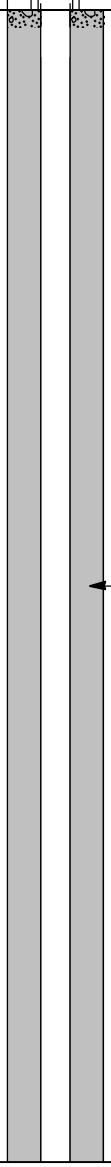
DATE STARTED: 7/25/2022
DATE COMPLETED: 7/26/2022
DRILLING CONTRACTOR: Cascade Drilling
DRILLING METHODS: Sonic Drilling & Wireline Rock Coring
LOGGED BY: J. Maag
CHECKED BY: A. Harford
NOTES: 6" Steel Stickup Protective Casing. 9396 replacement well.

TOTAL DEPTH: 119 feet bgs
DIAMETER: 6 inches
GROUND ELEVATION: 613.58
PVC ELEVATION: 616.04
NORTHING: 348497.3409
EASTING: 2072997.258

WELL DEVELOPMENT
METHOD(S): Mega Monsoon, Hurricane Pump & Bailer
DATE STARTED: 9/7/2022
DATE ENDED: 11/6/2022
DTW AT START: 112.65 feet bgs
DTW AT END: 119.0 feet bgs
VOLUME PURGED: 3.8 gallons

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION
						Brown, GRAVELLY SILT, some angular coarse gravel, very soft, non-plastic.
						1.0
		SC	36			Yellowish Brown, SANDY SILT, fine sand, non-plastic, very stiff, dry.
5	609					
						7.0
						Red, CLAY, coarse sand, greenish-gray, orange, purple, black sand particles, low plasticity, stiff, wet.
10	604					
						10.5
		SC	96			Red, CLAY, purple-red, green gray and yellow mottling, medium plasticity, very stiff, moist.
15	599					
20	594					

WELL DIAGRAM



SAMPLE TYPE

- Sonic Drilling (SC)
- HQ Wireline Rock Coring (HQ)

GRAPHIC LOG LEGEND

- Gravelly Silt
- Sandy Silt
- Clay
- Claystone Interbedded Shale
- Siltstone
- Shale

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DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION
		HQ	120	0		Red, CLAY, purple-red, green gray and yellow mottling, medium plasticity, very stiff, moist. *(continued)*
						24.0
25	589					Red, CLAYSTONE, purple-red, intensely weathered, moist.
						27.0
						Green Gray, SILTSTONE, slightly weathered, very thinly laminated, weak.
30	584	HQ	96	29.2		
						32.0
						Red, SILTSTONE, purple-red, slightly weathered, very thinly laminated, weak.
35	579					
						37.0
						Green Gray, CLAYSTONE, little pyrite, very thinly laminated, slightly weathered, weak.
40	574					
						41.5
		HQ	120	35		Red, CLAYSTONE, little pyrite, purple-red, very thinly laminated, slightly weathered, weak.

WELL DIAGRAM: Bentonite Grout (0 to 36)

SAMPLE TYPE

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- HQ Wireline Rock Coring (HQ)

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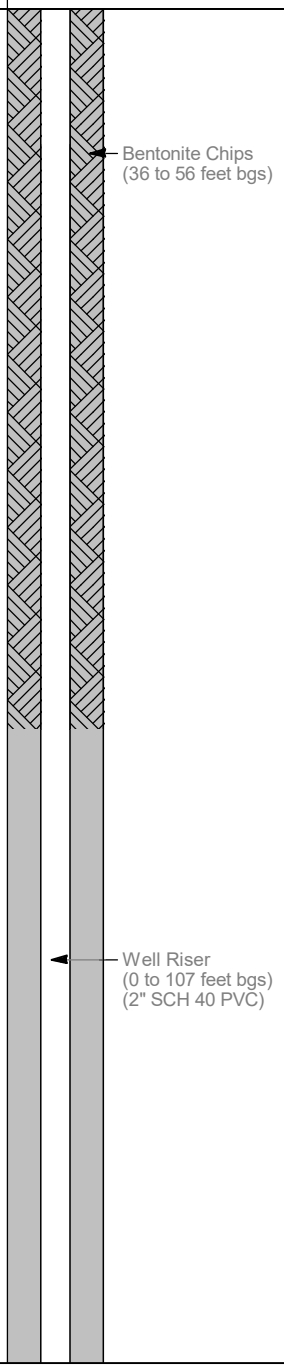
						Red, CLAYSTONE, little pyrite, purple-red, very thinly laminated, slightly weathered, weak. *(continued)*
45	569					45.0
						Red, CLAYSTONE, little pyrite, purple-red, very thinly laminated, intensely weathered, weak.
						47.0
						CLAYSTONE, purple, orange, green gray, moderately weathered, moderately weak, wet.
50	564					50.0
		HQ	96			CLAYSTONE, purple, greenish-gray, orange, intensely weathered, moderately disintegrated, very weak, wet.
55	559					
						57.0
						Red, CLAYSTONE, trace pyrite, purple-red, green gray, yellow, intensely weathered, moderately weak, wet.
60	554					
						61.0
		HQ	84	0		Red, CLAY SHALE, purple-red, orange, greenish gray, very thinly laminated, intensely weathered, very weak, wet.
65	549					

WELL DIAGRAM



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						Red, CLAY SHALE, purple-red, orange, greenish gray, very thinly laminated, intensely weathered, very weak, wet. *(continued)*	
						68.0	
70	544	HQ	72	27.8		Red, CLAYSTONE, purple-red, greenish gray, yellow, massive, moderately weathered, weak, wet.	
75	539						
						78.0	
						Red, SHALE, purple-red, greenish gray, sandy, very thinly laminated, intensely weathered, weak, wet.	← Bentonite Grout (56 to 101 feet bgs)
80	534						
						81.0	
		HQ	48	18.8			
85	529					Red, CLAYSTONE, purple-red, greenish gray, orange, massive, very weathered, weak, wet.	
90	524						

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Project Name: RWL/FAR Monitoring Well Installation
Project Number: 0643653
Project Location: Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION
						91.0
		HQ				Green Gray, SANDSTONE, trace mica, fine grained, very thinly laminated, moderately weathered, moderately strong, wet.
95	519					
						97.0
						Red, CLAY SHALE, purple-red, greenish gray, very thinly laminated, moderately weathered, very weak, wet.
						98.0
100	514					
		HQ	102			Green Gray, SANDSTONE, trace mica and pyrite, massive, slightly weathered, moderately strong, wet.
105	509					
						105.0
						Green Gray, CLAY SHALE, very thinly laminated, very weathered, weak, wet.
						107.0
110	504					
		HQ	120	26.7		Green Gray, SANDSTONE, dark gray, fine grained, massive, fresh, moderately strong, wet. [Cow Run Sandstone]

WELL DIAGRAM

- Bentonite Seal (101 to 105 feet bgs)
- Filter Sand (105 to 119 feet bgs) (Global #5)
- Well Screen (107 to 117 feet bgs) (2" SCH 40 PVC/ 0.01" slot)

SAMPLE TYPE

- Sonic Drilling (SC)
- HQ Wireline Rock Coring (HQ)

GRAPHIC LOG LEGEND

- Gravelly Silt
- Sandy Silt
- Clay
- Claystone Interbedded Shale
- Siltstone
- Shale

ACRONYM LEGEND

amsl = above mean sea level
bgs = below ground surface
DTW = depth to water
NA = not applicable
NM = not measured
NR = no recovery
PVC = polyvinyl chloride

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Telephone: + 1 (617) 646-7800

Client: Gavin Power, LLC
Project Name: RWL/FAR Monitoring Well Installation
Project Number: 0643653
Project Location: Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE & RUN	RECOVERY (inches)	RQD %	GRAPHIC LOG	MATERIAL DESCRIPTION	WELL DIAGRAM
115	499					Green Gray, SANDSTONE, dark gray, fine grained, massive, fresh, moderately strong, wet. [Cow Run Sandstone] *(continued)*	
						115.0	
						Green Gray, CLAYSTONE, dark gray, intensely weathered, intensely disintegrated, wet.	
						117.0	
						Not Recovered.	Sump (2" SCH 40 PVC/2' long) (117 to 119 feet bgs)
						119.0	
120	494					*Bottom of Boring @ 119.00 feet bgs*	
125	489						
130	484						
135	479						

SAMPLE TYPE

- Sonic Drilling (SC)
- HQ Wireline Rock Coring (HQ)

GRAPHIC LOG LEGEND

- Gravelly Silt
- Sandy Silt
- Clay
- Claystone Interbedded Shale
- Siltstone
- Shale

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2025-01

Client: Gavin Power, LLC
Project Name: RWL/FAR Monitoring Well Installation
Project Number: 0765682
Project Location: Cheshire, OH

DRILLING CONTRACTOR: Cascade Drilling
LOGGED BY: Glen Hook
GROUND ELEVATION: 645.634 feet NGVD29
DRILLING METHOD: Sonic Drilling/ Rock Coring
CHECKED BY: C. Kennedy/ J. Allen
TOC ELEVATION: 650.502 feet NGVD29
DATE BORING COMPLETED: 2/22/2025
TOTAL DEPTH: 40 feet bgs
NORTHING: 3050705.543
DATE WELL INSTALLED: 2/24/2025
BORING DIAMETER: 6 inches
EASTING: 2101525.59
DATUM: NGVD29
NOTES:

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE/ RUN	RECOVERY %	RQD %	U.S.C.S.	MATERIAL DESCRIPTION
					CL	Red Tan to Orange Tan, CLAY with sand and gravel locally, subrounded to rounded, moderately to poorly sorted, firm, moist.
						3.5
					ML	Very Dark Gray to Medium Gray, SILT with sand and gravel, organics (3" to 5" thick), angular to subrounded, firm, low plasticity, some tan mottling, moist.
5	640.6	SC 1	81			5.0
					CL-ML	Orange, Dark Red, Brown, CLAY with sand and silt, low plasticity, dry.
10	635.6					10.0
		SC 2	100		CL	Yellow, CLAY, trace silt, nonplastic, red and blue mottling, dry.
15	630.6					
						17.0
		SC 3	100		CL	Yellow, CLAY, trace silt, weathered red beds (clay shale), nonplastic, red and blue mottling, dry to moist.
20	625.6					20.0
		SC 4	100	0	CL	Red, CLAY, trace silt, weathered red beds (clay shale), transition from weathered to unweathered bedrock, red and blue mottling.
						22.5
						Yellow, weathered SANDSTONE (Morgantown Sandstone), 1' silt and fine sand, 0.5' fine-grained, hard, micaceous, dry.
25	620.6					24.0

WELL DIAGRAM

- Stickup Steel Casing
- Concrete Pad and 6" Aluminum Stickup Protective Casing
- Bentonite Grout (0 to 21 feet bgs) (Halliburton QuikGrout 20% Solids)
- Well Riser (0 to 28 feet bgs) (2" SCH 80 PVC)
- Bentonite Seal (21 to 25 feet bgs)

SAMPLING/ DRILLING TYPE:
- Sonic Drilling (SC)
- Wireline Rock Coring (RC)

GRAPHIC LOG LEGEND:
- Fill Materials
- Silt
- Silty Clay
- Clay
- Sandstone
- Claystone Interbedded Shale
- Depth to Water

ACRONYM LEGEND:
" = inches
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NGVD29 = National Geodetic Vertical Datum of 1929
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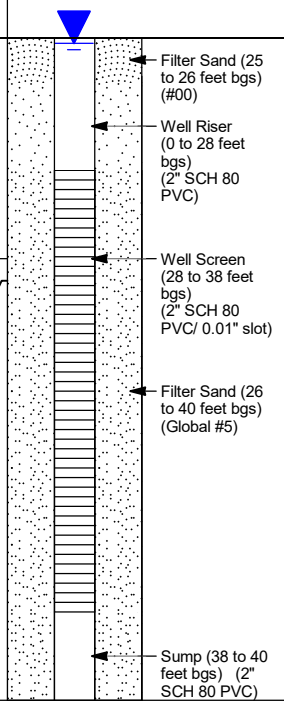
Client: Gavin Power, LLC
Project Name: RWL/FAR Monitoring Well Installation
Project Number: 0765682
Project Location: Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE/ RUN	RECOVERY %	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
30	615.6	RC 5	99	58			Green, Brown, Gray to Blue, SANDSTONE (Morgantown Sandstone), laminated to thinly bedded, moderately well sorted, subangular to subrounded, micaceous, upper 5' heavily oxidized and moderately fractured and weathered, fractures filled with green clay, cross beds present from 25'-26' and at 28', very fine sand from 26'-27.5', black laminations from 28-29', oxidized fractures at 27.5' and 28.2'. *(continued)*
							30.0
							30.5 Light Green, CLAYSTONE (Morgantown Sandstone), fine grained, well sorted with one large clast, little structure, laminated dark red mottling at base.
35	610.6	RC 6	63	31			Red, Dark Red, Brown, CLAYSTONE with gravel (Morgantown Sandstone), potential fossils or shells, clayey, vertically and horizontally fractured, two dull light green sandstone inclusions, bottom high plasticity, some yellow mottling, wet.
40	605.6						40.0
							Bottom of Boring @ 40.0 feet bgs
45	600.6						
50	595.6						

WELL DIAGRAM



SAMPLING/ DRILLING TYPE:
- Sonic Drilling (SC)
- Wireline Rock Coring (RC)

GRAPHIC LOG LEGEND:
- Fill Materials
- Clay
- Depth to Water
- Silt
- Sandstone
- Silty Clay
- Claystone Interbedded Shale

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Client: Gavin Power, LLC
Project Name: RWL/FAR Monitoring Well Installation
Project Number: 0765682
Project Location: Cheshire, OH

DRILLING CONTRACTOR: Cascade Drilling
LOGGED BY: Glen Hook
GROUND ELEVATION: 645.63 feet NGVD29
DRILLING METHOD: Sonic Drilling/ Rock Coring
CHECKED BY: C. Kennedy/ J. Allen
TOC ELEVATION: Not Applicable
DATE BORING COMPLETED: 2/10/2025
TOTAL DEPTH: 140 feet bgs
LATITUDE: 38.9623725
DATE WELL INSTALLED: Not Applicable
BORING DIAMETER: 6 inches
LONGITUDE: -82.14295962
DATUM: NGVD29
NOTES:

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE	RECOVERY %	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
5	640.6	SC 1	25		CL		Reddish-Brown to Dark Orange, FILL including Clay to fine Gravel, rounded to angular, low to high plasticity.
10	635.6						
							10.0
					CL		Brown mottled with Gray, FILL including Clay to fine Gravel, rounded to angular, moderate plasticity.
							11.5
15	630.6	SC 2	75		CL-ML		Reddish Brown to Reddish Purple, CLAY and SILT, well sorted, low plasticity, no odor, mottled gray.
20	625.6						

SAMPLING/ DRILLING TYPE:
- Sonic Drilling (SC)
- Wireline Rock Coring (RC)

GRAPHIC LOG LEGEND:
- Fill Materials
- Silty Clay
- Sandstone
- Claystone Interbedded Shale
- Shale

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Project Number: 0765682
Project Location: Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE	RECOVERY %	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
		RC 3	85	0	CL-ML		Reddish Brown to Reddish Purple, CLAY and SILT, well sorted, low plasticity, no odor, mottled gray. *(continued)*
							22.0 — Light Tan to Gray, SANDSTONE (Morgantown Sandstone), moderately competent, fine to medium, subrounded to subangular, bedded (0-5%), moderately decomposed, fractures light gray to tan with vitreous material.
							24.0
25	620.6	RC 4	83	85			Light Tan to Gray, SANDSTONE (Morgantown Sandstone), fine to medium, medium strong, subangular to subrounded bedded (5-15 cross-bedding), slight decomposition, slight disintegration, moderately fractured crossbedding observed, healed fracture with oxidation at 29'.
30	615.6						30.0
35	610.6	RC 5	95	67			Alternating Reddish Brown and Light Green CLAYSTONE (Morgantown Sandstone), weak, trace fine gravel near bottom, angular, laminated, moderately decomposed, moderate disintegration, highly fractured.
40	605.6						40.0
		RC 6	75	60			Reddish Brown to Dull Light Green, CLAYSTONE transitioning to SANDSTONE at bottom (Morgantown Sandstone). Top soft and weak, bottom moderate strength. Laminated, moderately to slightly decomposed, moderately to slightly disintegrated, highly fractured, healed vertical fractures observed, oxidation of fracture surface observed near bottom.

SAMPLING/ DRILLING TYPE:
- Sonic Drilling (SC)
- Wireline Rock Coring (RC)

GRAPHIC LOG LEGEND:
- Fill Materials
- Silty Clay
- Sandstone
- Claystone Interbedded Shale
- Shale

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DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE	RECOVERY %	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
							44.0
45	600.6						Blue to Gray, SANDSTONE (Morgantown Sandstone), very strong, very fine to fine, bedded with some crossbedding at top, moderately nondecomposed, slightly to moderately disintegrated, moderately fractured at top.
		RC 7	100	78			49.0
50	595.6						Rubble zone composed of surrounding material same as above (Morgantown Sandstone). Shells (0.25 cm to 2 cm) and pyrite observed, shells at 47'.
							54.0
55	590.6						Blue to Gray and Reddish Brown, interbedded fine SANDY SHALE and CLAYSTONE (Round Knob Shale), strong to very soft, laminated, moderately decomposed, slight disintegration, highly fractured, more clayey at top of run, pyrite present throughout, fewer shells than above, shells not well preserved.
		RC 8	55	73			
60	585.6						No recovery from 59' to 64'.
							64.0
65	580.6						Dark Red, Yellow, and Green, interbedded CLAYSTONE and fine SANDY SHALE (Round Knob Shale), bedded-laminated, moderately decomposed, moderate disintegration, mildly to moderately fractured, poor recovery because of clay, mottled.

SAMPLING/ DRILLING TYPE:
- Sonic Drilling (SC)
- Wireline Rock Coring (RC)

GRAPHIC LOG LEGEND:
- Fill Materials
- Silty Clay
- Sandstone
- Claystone Interbedded Shale
- Shale

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DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE	RECOVERY %	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
		RC 9	39	60			Dark Red, Yellow, and Green, interbedded CLAYSTONE and fine SANDY SHALE (Round Knob Shale), bedded-laminated, moderately decomposed, moderate disintegration, mildly to moderately fractured, poor recovery because of clay, mottled. *(continued)*
70	575.6						70.0
		RC 10	88	76			Green, Yellow, Dark Red, coarse SANDY SHALE (Round Knob Shale), bedded, some crossbedded clays, healed angular beds, moderately decomposed, moderately disintegrated, mildly to moderately fractured, mottled.
							74.0
75	570.6						
		RC 11	76	46			Same as above (Round Knob Shale), coarse sand and fine gravel within sandy shale matrix, mostly weathered shells in claystone matrix.
80	565.6						
							84.0
85	560.6						
		RC 12	97	69			Same as above (Round Knob Shale), more fine-grained sandy shale than above, less clay, moderately hard, clay to fine gravel bedded (0-30%), laminated, moderately decomposed, slight to moderate disintegration, less mottled.
90	555.6						

SAMPLING/ DRILLING TYPE:
- Sonic Drilling (SC)
- Wireline Rock Coring (RC)

GRAPHIC LOG LEGEND:
- Fill Materials
- Silty Clay
- Sandstone
- Claystone Interbedded Shale
- Shale

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DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE	RECOVERY %	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
							Same as above (Round Knob Shale), more fine-grained sandy shale than above, less clay, moderately hard, clay to fine gravel bedded (0-30%), laminated, moderately decomposed, slight to moderate disintegration, less mottled. *(continued)*
							92.0
							Same as above (Round Knob Shale), reddish brown, strong, horizontal joint at 94', angled fractured very lightly healed, infilled clays, less mottling.
							94.0
95	550.6	RC 13	110	61			Dark Red, Green, Yellow, Clayey to Sandy SHALESTONE (Round Knob Shale), moderately to very hard, less shells and gravel, laminated, mostly 0-5 degree fractures, few 5-45 degree fractures, moderately decomposed, slight to moderate disintegration, one hard portion around 97' with blueish very fine grained sandstone, angular contact, no pyrite, mottled.
							99.0
100	545.6						Same as above (Round Knob Shale), no pyrite, lots of shells, subangular to subrounded clasts.
							103.0
							Blue to Dark Gray, Clayey SHALE (Round Knob Shale), moderately hard, laminated (0-5), moderately decomposed, moderately disintegrated, highly fractured and healed fully, apparent oxidation in some fractures, complex fractures at 103', 103.5' and 104'.
							104.0
105	540.6	RC 14	77	57			Blue to Light Gray, fine SANDSTONE (Cow Run Sandstone), hard, well sorted, bedded-laminated (0-5 degrees), moderate to no decomposition, little to no disintegration, moderately fractured, claystone lens at 108' with natural fractures above and below, slightly oxidized surface, jagged edges on fractures.
							109.0
110	535.6	RC 15	81	57			Same as above (Cow Run Sandstone) with some local, light cross beds, one fracture at 109' healed and clay-filled, core cross-beds above fracture with fractures occurring at top of clay and shale seam.

SAMPLING/ DRILLING TYPE:
- Sonic Drilling (SC)
- Wireline Rock Coring (RC)

GRAPHIC LOG LEGEND:
- Fill Materials
- Silty Clay
- Sandstone
- Claystone Interbedded Shale
- Shale

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Project Location: Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE	RECOVERY %	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
115	530.6						Same as above (Cow Run Sandstone) with some local, light cross beds, one fracture at 109' healed and clay-filled, core cross-beds above fracture with fractures occurring at top of clay and shale seam. *(continued)*
		RC 16	97	41			115.0 Dull Light Green and Blue to Gray, fine SANDSTONE (Cow Run Sandstone), hard, homogeneous, well sorted, thin to very thin bedding (0% to 15%), some low angle cross beds, slight disintegration, slight to no decomposition, fractures at base, crossbeds prevalent at base, stylolite or shell at 115.5', assorted subangular to subrounded gravel, dark to light gray very fine grains at base, horizontal fractures across cross bedding at 116', 117', 117.1', 117.3', 117.5'.
120	525.6						117.5 Alternating beds of Green to Reddish Brown, interbedded CLAYSTONE and SANDSTONE (Cow Run Sandstone) generally same as above with some silty/clayey composition. 119.5 120.0 Similar to above (Cow Run Sandstone), clear lamination of reddish-brown and light green claystone.
125	520.6	RC 17	88	60			Dull Light Green and Blue to Gray, fine sandy SHALE and very fine SANDSTONE (Cow Run Sandstone), hard to moderately hard, well sorted with pyrite throughout and locally laminated, very few shiny muscovite in matrix, some mud drapes observed in upper 2', some slight sediment slump, no crossbedding, all laminated with variability in sand-shale content, generally 1"-2" layers of laminations, recalcified fossils.
130	515.6						129.0 Interbedded, interlayered sandy SHALE and CLAYSTONE (Cow Run Sandstone), similar to above. 130.0
135	510.6	RC 18	80	0			Brown CLAYSTONE (Anderson Claystone) with few gray Sandstone beds.

SAMPLING/ DRILLING TYPE:
- Sonic Drilling (SC)
- Wireline Rock Coring (RC)

GRAPHIC LOG LEGEND:
- Fill Materials
- Silty Clay
- Sandstone
- Claystone Interbedded Shale
- Shale

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Project Number: 0765682
Project Location: Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE	RECOVERY %	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
140	505.6						Brown CLAYSTONE (Anderson Claystone) with few gray Sandstone beds. *(continued)*
							140.0
							Bottom of Boring @ 140.0 feet bgs
145	500.6						
150	495.6						
155	490.6						
160	485.6						

SAMPLING/ DRILLING TYPE:
- Sonic Drilling (SC)
- Wireline Rock Coring (RC)

GRAPHIC LOG LEGEND:
- Fill Materials
- Silty Clay
- Sandstone
- Claystone Interbedded Shale
- Shale

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Client: Gavin Power, LLC
Project Name: RWL/FAR Monitoring Well Installation
Project Number: 0765682
Project Location: Cheshire, OH

DRILLING CONTRACTOR: Cascade Drilling
LOGGED BY: Glen Hook
GROUND ELEVATION: 645.69 feet NGVD29
DRILLING METHOD: Sonic Drilling/ Rock Coring
CHECKED BY: C. Kennedy/ J. Allen
TOC ELEVATION: Not Applicable
DATE BORING COMPLETED: 2/22/2025
TOTAL DEPTH: 135 feet bgs
LATITUDE: 38.96240542
DATE WELL INSTALLED: Not Applicable
BORING DIAMETER: 6 inches
LONGITUDE: -82.1431551
DATUM: NGVD29
NOTES:

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE	RECOVERY %	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
5	640.7	SC 1	95		CL-ML		Gray, Brown, and Yellow to Orange, FILL including sand, silt, clay and gravel, fine to coarse, subangular to rounded, poorly sorted, wood debris, trace dark angular gravel, 1" layer of light gray silt above clayey bottom.
10	635.7						10.0
15	630.7	SC 2	104		CL-ML		Red, CLAY with Silt, orange-yellow and silver-gray mottling, less mottled and more compact from 14-18 ft bgs, generally decreasing plasticity with depth.
20	625.7						

SAMPLING/ DRILLING TYPE:
- Sonic Drilling (SC)
- Wireline Rock Coring (RC)

GRAPHIC LOG LEGEND:
- Fill Materials
- Silty Clay
- Sandstone
- Claystone Interbedded Shale
- Shale
- Siltstone
- Boulders and Cobbles

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Project Number: 0765682
Project Location: Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE	RECOVERY %	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
		SC 3	97		CL-ML		Red, CLAY with Silt, orange-yellow and silver-gray mottling, less mottled and more compact from 14-18 ft bgs, generally decreasing plasticity with depth. *(continued)*
							23.0
							Dull Light Green and Yellow to Dark Red, fine SANDSTONE (Morgantown Sandstone), fine grained, vitreous fine grained sediment (mica), silty-clayey.
							24.0
25	620.7	RC 4	83	43			Tan to Brown, fine SANDSTONE (Morgantown Sandstone), moderately hard, micaceous, highly fractured, moderate disintegration, 45-degree fracture with oxidation at 25' and healed fracture with oxidation along bedding.
							29.0
30	615.7						Dark Brown to Gray, fine to medium SANDSTONE (Morgantown Sandstone), well sorted, some interbedded silt, moderately hard, mildly decomposed, micaceous.
							30.5
							Light Green, CLAYSTONE (Morgantown Sandstone), mildly hard, well sorted, oxidized laminations, little disintegration, minor decomposition.
							31.0
		RC 5	96	50			Red, CLAYSTONE (Morgantown Sandstone), laminated, soft, well sorted (33'-34').
							34.0
35	610.7						Same as above, Dark Red to Brown, CLAYSTONE (Morgantown Sandstone), soft.
							35.5
		RC 6	125	17			Dark Red to Tan, mechanically-rubblized SILTSTONE and CLAYSTONE (Morgantown Sandstone), fine gravel.
							38.0
40	605.7						Dark Red to Brown, CLAYSTONE (Morgantown Sandstone), high disintegration, moderate to slight decomposition, extremely fractured, laminated, well sorted, low plasticity, soft, blue gray sandstone inclusions.
							42.0
							Dull Light Green, Sandy SHALESTONE (Morgantown Sandstone), laminated, some cross-bedding, medium disintegration, moderate decomposition, highly fractured, well sorted, rounded to subrounded, moderately soft.
							43.0

SAMPLING/ DRILLING TYPE:
- Sonic Drilling (SC)
- Wireline Rock Coring (RC)

GRAPHIC LOG LEGEND:
- Fill Materials
- Silty Clay
- Sandstone
- Claystone Interbedded Shale
- Shale
- Siltstone
- Boulders and Cobbles

ACRONYM LEGEND:
" = inches
amsl = above mean sea level
bgs = below ground surface
NGVD29 = National Geodetic Vertical Datum of 1929
PVC = polyvinyl chloride
SCH = schedule
TOC = top of casing
U.S.C.S. = Unified Soil Classification System

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Attorney-Client Communication
Attorney Work Product
Prepared at the Request of Counsel

Client: Gavin Power, LLC
Project Name: RWL/FAR Monitoring Well Installation
Project Number: 0765682
Project Location: Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE	RECOVERY %	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
45	600.7	RC 7	80	22			Blue to Green, fine SANDSTONE (Morgantown Sandstone), thinly bedded, cross bedded with muddy layering (thin laminae), highly fractured, moderately hard, fractures in upper portion appear oxidized.
							48.0
50	595.7						Blue to Green, SHALESTONE (Morgantown Sandstone), laminated, some cross bedding, medium disintegration, moderate decomposition, highly fractured, well sorted, rounded to subrounded, moderately soft.
							50.0
55	590.7	RC 8	50	40			Dull Blue to Gray, fine SANDSTONE (Morgantown Sandstone), moderately hard, well sorted, few fine grained vitreous sand grains, mild disintegration, mild decomposition, moderately fractured, laminated.
							55.0
							Dull Light Blue to Green, SHALE (Round Knob Shale), pyrite occurring throughout, mildly hard, moderate decomposition, moderate disintegration, extremely fractured laminae.
							59.0
60	585.7						Same as above (Round Knob Shale) but with dark red mottling.
							60.0
65	580.7	RC 9	83	82			Top 1' similar to above (Round Knob Shale); rest of run Shaley/Silty, medium sand to fine gravel, matrix supported with clasts that are hard, subrounded to subangular, poorly sorted, disintegrated, moderately fractured, yellow mottling.

SAMPLING/ DRILLING TYPE:
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- Wireline Rock Coring (RC)

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Project Location: Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE	RECOVERY %	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
70	575.7					70.0	Top 1' similar to above (Round Knob Shale); rest of run Shaley/Silty, medium sand to fine gravel, matrix supported with clasts that are hard, subrounded to subangular, poorly sorted, disintegrated, moderately fractured, yellow mottling. *(continued)*
75	570.7	RC 10	120	0		78.0	Rubblized dark red and tan, CLAYSTONE and SILTSTONE (Round Knob Shale).
80	565.7	RC 11	163	17		82.0	Similar to above (Round Knob Shale).
85	560.7	RC 12	120	37			Similar to above (Round Knob Shale), rubblized from 87'-97' bgs.
90	555.7						

SAMPLING/ DRILLING TYPE:
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DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE	RECOVERY %	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
							Similar to above (Round Knob Shale), rubblized from 87'-97' bgs. *(continued)*
							92.0
95	550.7	RC 13	124	0			Same as above (Round Knob Shale), less mottling with depth, light blue fine SANDSTONE lens from 96.5'-97' bgs.
							99.0
100	545.7						Same as above (Round Knob Shale), dark red to brown.
							104.0
105	540.7	RC 14	74	84			Dull Light Blue to Gray, fine to medium SANDSTONE (Cow Run Sandstone), moderately hard, moderate to little disintegration, little decomposition, 6" disintegrated zone (healed fractures) at 104' and 105', bedded 0-30, some cross bedding laminated at 107.5' and finer grained, 6 fractures observed, 2 fractures near laminae (107.5'), very smooth, healed fractures at 105.5', 107.5', 108', 109', 109.25', and 109.5'.
							109.5
110	535.7						110.0 Light Blue, CLAYSTONE (Cow Run Sandstone), soft, plastic.
							Dull Light Green and Blue to Gray, fine to medium SANDSTONE (Cow Run Sandstone), moderately hard, little disintegration, little to no decomposition, 6 fractures observed, 2 at 110', 2 healed 60 degree fractures between 2 horizontal fractures, 1 at 115', 117', and 2 at 119', very thin cross beds (106.5'-107, 100.5, 101.5', 108-109') and normal bedding.

SAMPLING/ DRILLING TYPE:
- Sonic Drilling (SC)
- Wireline Rock Coring (RC)

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Project Number: 0765682
Project Location: Cheshire, OH

DEPTH (feet)	ELEVATION (feet amsl)	SAMPLE TYPE	RECOVERY %	RQD %	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION
115	530.7	RC 15	97	93			Dull Light Green and Blue to Gray, fine to medium SANDSTONE (Cow Run Sandstone), moderately hard, little disintegration, little to no decomposition, 6 fractures observed, 2 at 110', 2 healed 60 degree fractures between 2 horizontal fractures, 1 at 115', 117', and 2 at 119', very thin cross beds (106.5'-107, 100.5, 101.5', 108-109') and normal bedding. *(continued)*
							119.5
120	525.7						120.0 Light Green, CLAYSTONE (Cow Run Sandstone), laminated, lower in plasticity than claystone lens at 109.5'.
							120.5 Red to Yellow, CONGLOMERATE (Cow Run Sandstone), fine to coarse quartz and calcite clasts, veining and silty Cow Run composing the matrix, clast supported (80%-85%), rubblized, hard, red compacted moderately hard clay-silt inclusions, mottled.
125	520.7	RC 16	114	41			Blue to Light Green and Gray, fine Shaley SANDSTONE (Cow Run Sandstone), moderately hard, little to moderate disintegration, no decomposition, thin laminated bedding (0%-10%), highly fractured, pyrite observed in roughly 1 cm patches and at 127'.
							129.0
130	515.7	RC 17	63	60			Similar to above (Cow Run Sandstone), dull light green to gray, slightly more shiny gray mineral that occurs as fine sand, pyrite, moderately fractured, healed fractures, moderately disintegrated, little to no decomposition, well sorted, moderately hard.
							133.0
135	510.7						Similar to above (Cow Run Sandstone) but muddier and layered gray and dark red to brown for 6" before transitioning to dark red to brown shale, bioturbation observed at 135', moderately hard, slightly fractured, moderately disintegrated, little decomposition.
							135.0
							Bottom of Boring @ 135.0 feet bgs

SAMPLING/ DRILLING TYPE:
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- Wireline Rock Coring (RC)

GRAPHIC LOG LEGEND:
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APPENDIX C GAVIN RESIDUAL WASTE LANDFILL AND FLY ASH POND FIRST SEMIANNUAL SAMPLING EVENT OF 2025 ASD REPORT

First Semiannual Sampling Event of 2025 Alternate Source Demonstration Report

Gavin Residual Waste Landfill and Fly Ash Reservoir

PREPARED FOR
Gavin Power, LLC

DATE
2 September 2025

REFERENCE
0767401

SIGNATURE PAGE

First Semiannual Sampling Event of 2025 Alternate Source Demonstration Report

Gavin Residual Waste Landfill and Fly Ash Reservoir

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ACRONYMS AND ABBREVIATIONS

Acronym	Description
AEP	American Electric Power Service Corporation
ASD	Alternate Source Demonstration
BAP	Bottom Ash Pond
CCR	Coal Combustion Residuals
CFR	Code of Federal Regulations
cm/sec	centimeters per second
ERM	Environmental Resources Management, Inc.
FAR	Fly Ash Reservoir
Gavin	Gavin Power, LLC
GWI	Groundwater intercept
K	Hydraulic Conductivity
H2	Second Semiannual
mg/L	milligrams per liter
ODNR	Ohio Department of Natural Resources
ORSANCO	Ohio River Valley Water Sanitation Commission
Plant	General James M. Gavin Power Plant
SSI	Statistically significant increase
TDS	Total Dissolved Solids
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey

1. INTRODUCTION

1.1 REGULATORY AND LEGAL FRAMEWORK

In accordance with Title 40 Code of Federal Regulations (CFR), Part 257, Subpart D – Standards for the Disposal of Coal Combustion Residuals (CCR) in Landfills and Surface Impoundments (CCR Rule) – Gavin Power, LLC (Gavin) has been implementing the groundwater monitoring requirements of 40 CFR § 257.90 et seq. for the Residual Waste Landfill (RWL) and Fly Ash Reservoir (FAR) at the General James M. Gavin Power Plant (Plant) using a combined groundwater monitoring network for the RWL and FAR. Gavin calculated background levels and conducted statistical analyses for Appendix III constituents in accordance with 40 CFR § 257.93(h). Currently, Gavin is performing detection monitoring at the RWL and FAR in accordance with 40 CFR § 257.94.

Statistically significant increases (SSIs) over background concentrations were detected in one downgradient monitoring well for some Appendix III constituents for the first semiannual (H1) groundwater sampling event of 2025 and are explained in this Alternate Source Demonstration (ASD) Report. The first semiannual groundwater sampling event of 2025 was performed from February 26, 2025 to April 9, 2025. Review of data for quality assurance and statistical comparison was completed on June 4, 2025. Pursuant to 40 CFR § 257.94(e)(1), Gavin must establish an assessment monitoring program for the combined RWL/FAR groundwater monitoring system unless an ASD is completed and certified by a Professional Engineer within 90 days. Pursuant to 40 CFR § 257.94(e)(2), this ASD Report, which has been completed and certified by the September 2, 2025 deadline, will be included with the annual groundwater monitoring and corrective action report required under CFR § 257.90(e), which is due January 31, 2026.

An SSI for one or more Appendix III constituents is a *potential* indication of a release of constituents from a CCR unit to groundwater. In the event of an SSI, the CCR Rule provides that "… the owner or operator may demonstrate that a source other than the CCR unit caused the SSI over background levels for a constituent or that the SSI resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality…" (40 CFR § 257.94(e)(2)). If it is demonstrated that the SSI is the result of a source other than the CCR unit, then the CCR unit may remain in the Detection Monitoring Program instead of transitioning to an Assessment Monitoring Program. To implement this demonstration, an ASD must be made in writing and the accuracy of the information must be verified through certification by a qualified Professional Engineer (40 CFR § 257.94(e)(2)).

The United States Environmental Protection Agency (USEPA) guidance document, "Solid Waste Disposal Facility Criteria Technical Manual, EPA530-R-93-017, Subpart E" (USEPA 1993), specifies the following six lines of evidence that must be addressed to determine whether an SSI resulted from a source other than the regulated disposal unit:

- An alternative source exists;

- A hydraulic connection exists between the alternative source and the well with a statistically significant increase;
- Constituent(s) (or precursor constituents) are present at the alternative source or along the flow path from the alternative source prior to possible release from the unit;
- The relative concentration and distribution of constituents in the zone of contamination are more strongly linked to the alternative source than to the unit when the fate and transport characteristics of the constituents are considered;
- The concentration observed in groundwater could not have resulted from the unit given the waste constituents and concentrations in the unit leachate and wastes, and the site hydrogeologic conditions; and
- The data supporting conclusions regarding the alternative source are historically consistent with the hydrogeologic conditions and findings of the monitoring program.

Environmental Resources Management, Inc. (ERM) has prepared this ASD Report on behalf of Gavin to address each of these lines of evidence for the SSIs detected in groundwater collected from downgradient compliance wells at the RWL and FAR. The groundwater monitoring program and ASD have been prepared utilizing accepted practices incorporating regional information that has been confirmed with site specific measurements.

Some of the topics discussed in this report are also addressed in USEPA's November 22, 2022 Final Decision: Denial of Alternative Closure Deadline for General James M. Gavin Plant, Cheshire, Ohio (Final Decision). In other documents, Gavin has explained how the approaches described and documented in this report are consistent with USEPA regulations and guidance as well as with best engineering practices and judgment. Gavin has contested USEPA's findings in the Final Decision from a factual, technical and legal perspective.

1.2 BACKGROUND

The Plant is a coal-fired generating station located in Cheshire, Gallia County, Ohio (Figure 1-1), and is bounded to the east by the Ohio River. The RWL and FAR are two of three CCR units at the Plant that are subject to regulation under the CCR Rule (the third unit is the Bottom Ash Pond [BAP] but that unit is not the focus of this report). The RWL is approximately 400 acres in size and is located about 1.25 miles northwest of the Plant (Figure 1-2). The CCR material disposed in the RWL is Flue Gas Desulfurization byproduct (consisting of scrubber cake, fly ash, and lime) and other approved materials (water treatment sludge, bottom ash, lime ball mill rejects, coal pulverizer rejects, and sand/moss from the vertical flow wetlands).

The FAR is approximately 300 acres in size and is located about 2.5 miles northwest of the Plant (Figure 1-2). From the mid-1970s until January 1995, fly ash was sluiced to the FAR and the settled CCR materials in the FAR were retained behind the Stingy Run Fly Ash Dam that formed the FAR. The FAR was closed in place, and the closure was completed in 2021. Closure was certified on July 30, 2021.

An updated combined groundwater monitoring system was certified in August 2021 to collectively monitor for potential releases from the RWL and FAR. Previously, Gavin maintained and monitored two separate (though adjacent) groundwater monitoring networks for the RWL and FAR, respectively. The combined monitoring network was certified on 31 August 2021 with completion of the Updated Groundwater Monitoring System Evaluation and Certification—40 CFR 257.91 (ERM 2021).

The combined certified network which monitors both the RWL (Figure 1-3) and FAR (Figure 1-4) currently includes 24 upgradient and 15 downgradient monitoring wells located in the Alluvium, Morgantown Sandstone, and Cow Run Sandstone. The upgradient wells are placed to accurately represent the quality of background groundwater that has not been affected by any potential leakage from the RWL and FAR units, while the downgradient wells in the network are positioned at the downgradient boundary of waste to detect potential release of CCR constituents from the CCR units into groundwater in the uppermost aquifer.

Consistent with the CCR Rule and with Gavin's Statistical Analysis Plan (ERM 2017), an interwell prediction limit approach was used to identify potential impacts to groundwater. Upper prediction limits were developed for the Appendix III parameters; in the case of pH, a lower prediction limit was also developed. Documentation of the development of the upper prediction limits and lower prediction limit is provided in the 2018 Alternate Source Demonstration for the RWL (ERM 2018b).

In 2022, six new monitoring wells were installed around the RWL and FAR to act as replacements for previously existing monitoring wells that were part of the certified monitoring network but that had to be removed as a result of a variety of factors, including landfill expansion activities. Another eight new wells were installed in 2022 around the RWL and FAR to monitor groundwater in between existing monitoring well locations. Gauging of water levels and collection of samples for laboratory analysis has been performed at these wells since their installation. One additional monitoring well (2025-01) was installed in 2025 east of the FAR to replace a damaged well. This well has not been sampled at the time of this report. These data are being used to evaluate the potential addition of the new wells to the certified monitoring network.

1.3 GEOLOGY AND HYDROGEOLOGY

The shallowest geologic materials at the FAR/RWL include mine spoil, fill, residual fine-grained soils, and weathered and fractured bedrock (ERM 2021a). Measured hydraulic conductivities for residual fine-grained soils range from 1.03×10^{-8} centimeters per second (cm/sec) to 5.60×10^{-9} cm/sec (AEP, 1993). The shallowest weathered and fractured bedrock present at the Site includes the Pomeroy Sandstone and Coal, the Pittsburgh Sandstone and Coal, the Bellaire Sandstone, and the Connellsville Sandstone units. Although some of these units may be partially or fully saturated in the vicinity of the FAR and RWL, these formations generally are not capable of yielding usable quantities of groundwater, and thus are not considered part of the uppermost aquifer at the FAR/RWL. In the vicinity of the Site, bedrock dips to the southeast at approximately 17 feet/mile (AEP 1993).

The Connellsville Sandstone is still present in portions of the ridges that surround the FAR valley and the RWL. However, the Connellsville Sandstone has been completely eroded in substantial portions of the valley areas of the FAR, especially at the eastern extent of the FAR nearest the current extent of Stingy Run. The Connellsville Sandstone has also been partially or completely eroded in portions of the valley areas underlying the RWL.

Beneath the Connellsville Sandstone are the Clarksburg Red Beds, which is a regionally extensive aquitard (low-permeability rock layer) with a typical thickness of approximately 40 to 50 feet and average hydraulic conductivity values for the formation ranging from 2.1×10^{-7} cm/sec to 7.8×10^{-8} cm/sec (Geosyntec, 2012). The Clarksburg Red Beds hydraulically isolate the shallower bedrock formations from the underlying aquifers. The Clarksburg Red Beds have been observed to be partially or entirely eroded in portions of the valley areas of the FAR and RWL (Figures 1-5 and 1-6), especially in the eastern extent of the FAR valley areas. However, residual fine-grained soils generated in-situ by the weathering process are generally present in areas where erosion of the Clarksburg Red Beds has occurred. Based upon measured hydraulic conductivity values for the residual fine-grained soils (1.03×10^{-8} cm/sec to 5.60×10^{-9} cm/sec), these soils provide hydraulic separation similar to that provided by the Clarksburg Red Beds. Beneath the Clarksburg Red Beds are the Morgantown Sandstone and the Cow Run Sandstone. Together these units are interpreted as the uppermost aquifer beneath the RWL and FAR (Geosyntec 2016a; Geosyntec 2016b).

The Morgantown Sandstone is composed of two thin sandstone beds (upper and lower), which are separated by clay shale. The Morgantown Sandstone unit has a total average thickness of approximately 30 feet, and the upper and lower sandstone beds generally range in thickness from approximately three to seven feet. It has been documented through review of historical boring logs that the Morgantown Sandstone has been removed by erosion and is absent in portions of the Stingy Run and Kyger Creek valley areas. The Morgantown was also confirmed to be absent at recent boring 2022-06, which was advanced in 2022 in the Stingy Run valley at the northeastern end of the RWL (ERM 2024). Groundwater migrating east-southeast within the Morgantown Sandstone along the eastern portion of the RWL discharges to the alluvial aquifer located within the Stingy Creek and Kyger Creek valleys. Thus, the alluvial aquifer is also considered part of the uppermost aquifer where the Morgantown Sandstone is absent in these areas.

Below the Morgantown Sandstone is a unit of approximately 60 feet of interbedded claystone/clay shale and non-crystalline limestone layers, collectively known as the Round Knob Shale. These strata extend to the top of the underlying Cow Run Sandstone. Together, the residual fine-grained soils, the Clarksburg Red Beds, and the Round Knob Shale unit provide hydraulic separation from the aquifers underlying the RWL. Though the Clarksburg Red Beds have been partially or entirely eroded in portions of the FAR valley areas, the residual fine-grained soils and deeper Round Knob Shale unit provide hydraulic separation from the aquifers underlying the FAR similar to that provided by the collective lithologic units underlying the RWL.

Below the Round Knob Shale, the Cow Run Sandstone has an average thickness of 30 feet and is characterized regionally as a coarse-grained sandstone and sandy shale. The Cow Run Sandstone unit is continuous under the FAR/RWL and considered the base of the uppermost aquifer. Beneath

the Cow Run Sandstone are the Portersville Limestone and the Anderson Clayshale which consist primarily of shale, claystone, and clay shale (Geosyntec 2012). These low permeability formations are interpreted to be the lower hydraulic boundary of the uppermost aquifer.

1.3.1 GROUNDWATER FLOW

The removal of strip mine ponds, installation of groundwater intercept (GWI) drains, and placement of the composite liner under the RWL resulted in decreased recharge to the Morgantown Sandstone and Cow Run Sandstone. The changes during and post-construction were interpreted to result in the decline of potentiometric elevations up to 10 feet, which is similar to observed declines at another AEP residual waste landfill (AEP 1993).

At a regional scale, groundwater within the Morgantown Sandstone and Cow Run Sandstone generally flows from the northwest to the southeast under the FAR and the RWL toward the Ohio River, which is the primary regional discharge boundary for groundwater. At Site-scale, several factors influence groundwater flow directions in the area of the FAR/RWL, including topographic ridges and suppression of infiltration related to the FAR cap and the liner system of the RWL. Ridges along the western, eastern, and southern perimeters of the RWL constitute areas of recharge. Due to removal of strip mine ponds, installation of GWI drains, and placement of the composite liner, recharge to the center of the RWL has been cut off (AEP, 1993). Recent potentiometric surface maps, including those prepared for this report (Figures 1-7 and 1-8), incorporate not only the information from existing monitoring wells but also consider additional relevant data including original land surface topography, current land surface topography, landfill expansion, remaining recharge areas outside of the landfill expansion, and any effect of the GWIs.

1.3.1.1 GROUNDWATER FLOW ALONG THE WESTERN BOUNDARY OF THE RWL/FAR

To the west of the FAR/RWL, groundwater flows from west to east before joining the overall flow pattern to the southeast. The interpretation of west to east groundwater flow at the western boundary of the RWL is based on specific past and current observations along the western boundary. Groundwater flow maps prepared for the 1993 RWL Permit to Install (AEP, 1993; Figure No. 21) and the 1999 reissued Potentiometric Map of the RWL (AEP Drawing No. 3J of Drawing 12-30729-5) both interpreted groundwater flow from west to east in the Morgantown from a recharge area near well 94131 toward the historical valley near Pond 1. The potentiometric contours in AEP Figure No. 21 and AEP Drawing No. 3J of Drawing 12-30729-5 also indicate a recharge area farther north, near wells 93102 and 94125, with components of groundwater flow to the southeast and east along the northwestern RWL boundary.

The 1960 USGS topographic map shows a topographic ridge existed east of Turkey Run Road, in the area that would become the western boundary of the RWL (USGS, 1960) The correlation of the potentiometric highs on the 1993 and 1999 figures referenced above and topographic highs suggests the area east of Turkey Run Road was a recharge area prior to the construction of the RWL. The USGS quadrangle notes the presence of historical mines in this area, which is interpreted to enhance recharge along ridges due to mine collapse and the presence of near-

vertical fractures. While there has been some modification of the land surface in recent years associated with the westward expansion of the RWL, the current land surface topography still consists of a ridge between the RWL and Turkey Run Road, as shown in Geologic Cross Section A-A' (Figure 1-5).

The RWL is located on the eastern side of this surface and groundwater ridge, so groundwater flow is interpreted to be from west to east at the western edge of the RWL, consistent with gravity-driven groundwater flow from areas of higher topographic relief to areas of lower topographic relief (Toth, 2009). This west to east flow pattern indicated in the 1993 interpretation is expected to be enhanced due to the reduction in recharge caused by removal of strip mine ponds that had acted as local recharge points within and near the RWL, installation of GWI drains which currently facilitate the movement of shallow groundwater to areas outside the RWL, and installation of the RWL liner which by design inhibits the downward migration of water (AEP, 1993).

Groundwater flow maps provided in the 2018 through 2024 Annual Groundwater Monitoring and Corrective Action Reports consistently show an easterly flow component in the Morgantown and Cow Run (ERM, 2019; ERM, 2020; ERM, 2021b; ERM, 2022; ERM, 2023; ERM, 2024; ERM, 2025). Justification for this interpretation based on potentiometric elevation data includes the following:

- The potentiometric surface at Morgantown well 2019-02 was higher than nearby Morgantown wells 2019-06 and 9535 in five out of six gauging events conducted between 2020 and 2022. The physical configuration of the wells and the measured piezometric elevations indicate an eastward groundwater flow direction in the Morgantown on the western side of the RWL.
- The potentiometric surface at Cow Run monitoring well 94126 was higher than nearby well 93100 in five out of six gauging events conducted between 2018 and 2019. The physical configuration of the wells and the measured piezometric elevations indicate an eastward groundwater flow direction in the Cow Run on the western side of the RWL.
- A comparison of potentiometric elevation data at wells 94125 and 2019-06 also supports the eastward flow interpretation. Well 94125 was abandoned in 2019 due to RWL expansion and replaced in 2020 by 2019-06, which was located 450 feet to the west, outside the new boundary of waste. The average potentiometric elevation at 94125 from 2013 to 2019 was 589.47 feet above sea level and the average elevation at 2019-06 from 2020 to 2023 is 601.79 feet above sea level. The 12.32-foot difference in average elevation over several years generally supports the interpretation of groundwater flow from west to east.

1.3.1.2 GROUNDWATER FLOW ALONG THE EASTERN BOUNDARY OF THE RWL/FAR

The interpretation of groundwater divides east of the RWL eastern waste boundary and within remnant highwalls (*e.g.*, near wells 94122, MW-15, and MW-16) is based on specific past and current observations along the eastern boundary, similar to those used to assess the groundwater

divide along the western boundary of the RWL. The groundwater flow map prepared for the 1993 RWL PTI (AEP, 1993; Figure No. 21) interpreted radial groundwater flow in the Morgantown on the eastern side of the RWL from a recharge area near historic well 94122 and existing well 2001. This radial flow pattern is indicative of a recharge area and existed prior to the construction of the RWL.

The 1960 USGS topographic map shows a topographic ridge existed on the eastern boundary of the RWL at historic well 94122 and existing well 2000 (USGS, 1960). A ridge also ran northwest near the former FAR overflow spillway towards wells 2022-04 and 2022-05. Potentiometric highs were documented both on the eastern side of the future RWL near where the Stacker Pad currently exists, and north of where Pond 1 currently exists (AEP, 1993; Drawing No. 3J of Drawing 12-30729-5). The correlation of the potentiometric highs and topographic highs suggests that these areas were recharge areas prior to the construction of the RWL. The USGS quadrangle notes the presence of historical strip mines in this area, which may have enhanced recharge along ridges due to mine collapse and the presence of near-vertical fractures. While there has been some modification of the land surface in recent years associated with the expansion of the RWL, the current land surface topography still consists of a ridge along the eastern and northeastern sides of the RWL.

The groundwater divide prevents groundwater under the RWL from flowing towards the east in this area. West of the hydraulic divide located on the eastern side of the RWL, groundwater flow is interpreted to be from east to west before turning and flowing to the southeast. This east-to-west flow pattern was and is expected to be enhanced from 1993 interpretations due to the removal of strip mine ponds, installation of GWI drains, and placement of the composite liner that cut off recharge to the aquifer beneath the RWL (AEP, 1993).

1.3.1.3 REFINEMENT IN INTERPRETATION OF GROUNDWATER FLOW BENEATH THE RWL/FAR

In 2018, federal and state groundwater potentiometric elevation data sets for monitoring wells of the Morgantown and Cow Run were combined to increase spatial resolution and limit uncertainty in the interpretation of groundwater flow direction. This assessment identified: (i) the area of low hydraulic pressure along the axis of the landfill; (ii) groundwater flow from west to east on the western boundary; and (iii) a potentiometric high on the northeastern boundary of the RWL. The updated interpretation of regional groundwater flow in the Morgantown and Cow Run was from northwest to southeast towards the Ohio River. The overall interpretation of groundwater flow in the vicinity of the RWL/FAR is strongly influenced by site geology, pre-construction topography, and site preparation as hydraulic information is no longer able to be obtained from within the RWL due to the liner system or from within the FAR due to the cap.

Generally, the interpretations of groundwater flow under the RWL have been relatively consistent with overall flow towards the southeast. However, recent maps use higher-resolution datasets and differ in some ways from the flow directions and hydraulic features indicated in the 2012 PTI, such as the aforementioned ridge (Geosyntec, 2012). As shown in the 2018 through 2024 Annual GWMCA Reports, existing wells located along the eastern and northeastern boundary include

couplet wells 2002 and 2003, and 2022-04 and 2022-05, located in the Morgantown and Cow Run, respectively. At these locations, the Morgantown has a higher potentiometric surface than the Cow Run. These downward gradients demonstrate the presence of recharge areas. Groundwater flow direction maps prepared for the 2018-2024 Annual GWMCA Reports consistently show groundwater mounds and radial flow in the Morgantown in this area.

1.4 2025 H1 GROUNDWATER SAMPLING EVENT

The data from the first semiannual groundwater sampling event from 2025 were compared to the upper and lower prediction limits for the Appendix III parameters, and SSIs for Appendix III analytes were identified in one well. Tables 1-1 and 1-2 summarize occurrences of SSIs from the H1 2025 sampling event.

TABLE 1-1 NO SSIS IN MORGANTOWN SANDSTONE AND ALLUVIUM DOWNGRADIENT MONITORING WELLS

Analyte	Monitoring Well								
	96157	94137	9802	2016-05	2000	2018-02	2018-04	93108	9806
Boron	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ
Calcium	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ
Chloride	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ
Fluoride	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ
pH, field	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ
Sulfate	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ
TDS	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ

Notes: ϕ = No SSI; SSI = statistically significant increase; TDS = Total Dissolved Solids
Results from groundwater samples collected in March/April 2025.

TABLE 1-2 SSIS IN COW RUN SANDSTONE DOWNGRADIENT MONITORING WELLS

Analyte	Monitoring Well				
	2016-06	2018-01[1]	2018-03	94136	9631
Boron	ϕ	NS	ϕ	ϕ	ϕ
Calcium	ϕ	NS	ϕ	ϕ	SSI
Chloride	ϕ	NS	ϕ	ϕ	SSI
Fluoride	ϕ	NS	ϕ	ϕ	ϕ
pH, field	ϕ	NS	ϕ	ϕ	ϕ
Sulfate	ϕ	NS	ϕ	ϕ	ϕ
TDS	ϕ	NS	ϕ	ϕ	SSI

Notes: ϕ = no SSI; NS= not sampled; SSI = statistically significant increase; TDS = Total Dissolved Solids
Results from groundwater samples collected in March and April 2025.
[1] Well 2018-01 was abandoned in 2022. A replacement monitoring well is currently being evaluated.

This ASD Report identifies the regional discharge of naturally occurring brine originating from bedrock as the source of calcium, chloride, and total dissolved solids (TDS) detected in groundwater collected from monitoring well 9631. Supporting information and additional discussion of the lines of evidence are presented in subsequent sections of this ASD Report.

2. DESCRIPTION OF ALTERNATE SOURCES

Regional Brine is identified as the alternate source for the calcium, chloride, and TDS that are observed at the RWL/FAR. This a due to naturally occurring brine originating in/from bedrock (i.e., Cow Run Sandstone) as observed in shallow groundwater in and around Gavin.

A summary of regional brine and its influence on groundwater quality is provided below.

2.1 REGIONAL BRINE

Naturally occurring brine, which is known in the Ohio River Valley to have elevated levels of calcium, chloride, and other trace elements, exists in the subsurface (Stout et al. 1932; ORSANCO 1984; ODNR 1995). The discharge of brines is seen at a regional scale, with shallow wells near the Ohio River observing brine impacts because of the vertical head gradient driving overall flow upwards from bedrock to alluvium (USGS 1997). The Cow Run Sandstone is the shallowest sandstone of any importance in Ohio where brine of marine origin has been observed (Phalen 1919; Stout et al. 1932). Brine was discovered at the land surface approximately 10 miles southwest of the Plant in Gallipolis, Ohio and was utilized for the commercial production of salt beginning in 1807. This commercial production was enhanced by advancing a boring to a depth of 100 feet below ground surface, which resulted in a brine much stronger than found at the land surface (Stout et al. 1932). Naturally occurring brine was also identified at the land surface in Jackson, Ohio approximately 30 miles west of the Plant (ODNR 1995). The regional presence of shallow brine indicates the potential for naturally occurring brine to contribute Appendix III constituents in groundwater at the Plant. Evidence of brine impacts near the Plant includes specific conductivity measurements at several Cow Run Sandstone monitoring wells upgradient of the RWL and FAR (2016-10, 2019-07, 2019-09) that are consistently greater than 30,000 µS/cm and reach as high as 55,485 µS/cm at monitoring well 2019-07. For reference, the approximate specific conductivity of seawater is 50,000 µS/cm (USGS 2019). The same upgradient wells have historically contained elevated levels of constituents like calcium and chloride which range as high as 1,200 mg/L and 23,000 mg/L, respectively.

Site specific evidence on the presence of brine and the constituents present within brine is discussed in Section 4.

3. HYDRAULIC CONNECTIONS TO THE ALTERNATE SOURCES

Explanations of the hydraulic connections between potential alternate sources and downgradient wells at the RWL/FAR were provided in the first ASD Reports for the FAR and RWL (ERM 2018a, ERM 2018b) and are summarized below. Groundwater potentiometric contour maps for the Morgantown and Cow Run Sandstone are depicted in Figures 1-7 and 1-8, respectively.

3.1 HYDRAULIC CONNECTION TO REGIONAL BRINE

Regional groundwater within the fractured sedimentary bedrock in the Ohio River Valley generally flows from areas of higher topographic elevation towards areas of lower elevation, ultimately discharging to the Ohio River (ORSANCO 1984). Precipitation infiltrates the land surface to recharge the underlying aquifers below, and the flow of groundwater within these aquifers is primarily driven by the gravitational force on groundwater (differences in hydraulic head) within the bedrock. The Cow Run Sandstone extends west of the RWL/FAR where naturally occurring brine (with elevated calcium, chloride, and TDS) is known to impact Cow Run groundwater (Phalen 1919, Stout et. al. 1932). As depicted in Figures 1-7 and 1-8, the Morgantown and Cow Run under the southeastern portion of the FAR and under the RWL contain a region of lower hydraulic pressure in comparison to the surrounding areas. The forested and pastured areas surrounding the FAR and RWL are more permeable and exhibit greater infiltration than the FAR and RWL, which have either an engineered cap (FAR) or liner (RWL) designed to reduce or eliminate recharge to the underlying aquifers. Thus, the pathway for regional groundwater flows through the fractured bedrock from regions surrounding the RWL/FAR to regions of lower pressure south and east of the RWL and eventually toward the Ohio River. As described in Section 2, Cow Run monitoring wells 2016-10, 2019-07, and 2019-09, which are hydraulically upgradient of the RWL and FAR exhibit elevated specific conductivity measurements, consistent with regional observations of brine. Based on these considerations, the fractured rock of the sandstones is hydraulically connected to brine, which is the alternate source of calcium, chloride, and TDS.

3.1.1 GROUNDWATER FLOW RATES

Packer tests were completed in 2012 to assess hydraulic conductivity for locations in both the Morgantown and Cow Run Sandstone around the northern portion of the RWL (AEP and Geosyntec 2012). The range of hydraulic conductivity values from the packer tests in the Morgantown and Cow Run are provided in Table 3-1.

TABLE 3-1: ESTIMATED HYDRAULIC CONDUCTIVITY VALUES FOR MORGANTOWN AND COW RUN SANDSTONE

	Average K	Low K	High K
Morgantown (Geosyntec 2012)	7.18 x 10^{-5} cm/sec	2.2 x 10^{-8} cm/sec	4.6 x 10^{-4} cm/sec
Cow Run (Geosyntec 2012)	2.92 x 10^{-5} cm/sec	5.0 x 10^{-8} cm/sec	5.9 x 10^{-4} cm/sec

Notes: cm/sec = centimeters per second; K = hydraulic conductivity
Geosyntec 2012 values derived from packer tests (10-foot interval) completed in boreholes across mainly the northern part of the RWL.

The velocity of groundwater flowing through the Morgantown Sandstone was estimated in 2024 based on the measured horizontal hydraulic gradient (0.010 feet/feet), estimated hydraulic conductivity of 7.18 x 10^{-5} cm/sec (AEP and Geosyntec 2012), and an estimated effective porosity value of 0.01 for fractured bedrock. The estimated groundwater velocity calculated is approximately 77 to 79 feet/year (ERM 2025).

The velocity of groundwater flowing through the Cow Run Sandstone was estimated for 2024 based on the measured horizontal hydraulic gradient (0.010 feet/feet), the estimated hydraulic conductivity of 2.92 x 10^{-5} cm/sec (AEP and Geosyntec 2012), and an effective porosity value of 0.01 for fractured bedrock. The estimated groundwater velocity calculated is approximately 31 to 32 feet/year (ERM 2025).

Fractures observed at the site vary in frequency, distribution, and orientation as seen by the variability in monitoring well recharge rates and the measured hydraulic conductivity (Table 3-1). Groundwater flow is expected to occur primarily through the fractures, as the porosity of the fractures is expected to be much greater than the porosity of the rock matrix. Mine-roof collapse in underground mines commonly causes the overlying rocks to settle and fracture (AEP 1993). This settling may cause subsidence and the vertical propagation of extensive fractures to the land surface. Vertical seepage can also occur to lower aquifers along these steeply inclined stress relief fractures (AEP 1993). As such, areas of the Site that were previously mined, including the ridges surrounding the RWL and FAR, are expected to act as recharge areas.

4. CONSTITUENTS ARE PRESENT AT THE ALTERNATE SOURCES OR ALONG THE FLOW PATHWAYS

Regional brine is identified as the source of calcium, chloride, and TDS in RWL/FAR downgradient groundwater. Groundwater quality at the RWL/FAR is also influenced by external sources, as described in Sections 2, 3, and 7.

4.1 REGIONAL BRINE

Regional brine, as discussed above, is present in the area of the Plant and locally in bedrock under the RWL/FAR. Federal monitoring wells 2019-07 and 2019-09, which were installed upgradient of the RWL in Cow Run Sandstone, have chemical signatures indicating brine. In addition to the brine signatures observed in upgradient RWL wells, brine signatures have also been detected in Cow Run wells located at the BAP. At the BAP, concentrations of calcium, chloride, fluoride, and TDS are generally higher, and in some cases one to two orders of magnitude higher in bedrock than in the overlying alluvial aquifer, consistent with a regional brine signature. The ranges for calcium, chloride, and TDS in upgradient Morgantown groundwater (2019-02 and 2019-06), upgradient Cow Run groundwater (2019-07 and 2019-09), and brine-impacted wells located at the BAP (BAC-09, BAC-11, BAC-13, BAC-19) are presented in Table 4-1.

TABLE 4-1 CONCENTRATIONS IN ON-SITE BRINE IMPACTED BEDROCK GROUNDWATER

Analyte	Units	Upgradient Morgantown Groundwater at the RWL	Upgradient Cow Run Groundwater at the RWL	Bedrock Groundwater at the BAP
Calcium	mg/L	100	1,200	110-2,600
Chloride	mg/L	3,400	22,000-23,000	960-27,000
TDS	mg/L	3,900	23,000-26,000	1,700-31,000

Notes: BAP = Bottom Ash Pond; mg/L = milligrams per liter; RWL = Residual Waste Landfill; TDS = total dissolved solids
Upgradient Morgantown Groundwater at the RWL includes data from the monitoring well 2019-06 sample collected in February 2025.
Upgradient Cow Run Groundwater at the RWL includes data from monitoring wells 2019-07 and 2019-09 samples collected in April 2025.
Bedrock Groundwater at the BAP includes data from monitoring wells BAC-09, BAC-11, BAC-13, BAC-19 samples collected in March 2025.

Based on a review of permit applications for historical oil and gas wells installed within the Gavin property by prior owners, the Ohio Department of Natural Resources (ODNR) routinely required applicants to identify the company responsible for collecting, transporting, and disposing of salt water to be produced by the proposed well. Oil and gas wells in the vicinity of the Gavin Plant were typically drilled to a depth of approximately 1,800 feet below ground surface and recovered brine was temporarily stored in pits at the wellsite prior to offsite disposal. In addition, the

permits demonstrate that the boreholes were typically not sealed below 250 feet below ground surface if oil and gas were not found, which would leave an unsealed borehole that could allow the upward migration of brine to shallower strata, including the Cow Run. These ODNR records demonstrate the naturally occurring presence of brine at the Gavin property in geologic strata located beneath the Cow Run Sandstone and the potential for upward migration of brine through unsealed boreholes (ODNR 2024).

The elevated concentrations of calcium, chloride, and TDS in the upgradient bedrock groundwater indicate that these constituents are present in brine at the regional level and along flow paths to Cow Run wells at the Gavin Plant.

5. LINKAGES OF CONSTITUENT CONCENTRATIONS AND DISTRIBUTIONS BETWEEN ALTERNATE SOURCES AND DOWNGRADIENT WELLS

5.1 REGIONAL BRINE

As discussed in Sections 2 and 4, the concentrations of calcium, chloride, and TDS are elevated in regional brine. Table 4-1 demonstrates that the concentration of calcium, chloride, and TDS are higher in Cow Run groundwater upgradient of the RWL than in Morgantown groundwater in the area. This is indicative of a source emanating from a deeper stratum (e.g. where brine is found). As demonstrated in Section 4, oil & gas well permits indicate that brine is present in sandstone strata under the RWL/FAR.

Regionally, concentrations of calcium exceeding 10,000 mg/L, chloride exceeding 50,000 mg/L, and TDS exceeding 100,000 mg/L have been observed in Ohio brines (Stout et. al. 1932). Locally, the concentrations of calcium, chloride, and TDS observed in groundwater from monitoring well 9631 are consistent with upgradient wells impacted by regional brine, as summarized in Table 5-1. As described in Section 3, the pathway for regional groundwater follows hydraulic pressure gradients through the fractured Cow Run Sandstone from regions located north, west and southwest of the RWL/FAR, to the southern and eastern regions toward the Ohio River. As described in Section 3.1.1, hydraulic conductivity of the underlying bedrock varies at the site, resulting in brine impacts being localized to individual zones. Thus, there is a well-documented regional source of brine, brine impacts are detected at upgradient wells at the Site, hydraulic pathways exist from deeper to shallower strata and the similarity of the calcium, chloride, and TDS concentrations between monitoring well 9631 and upgradient wells 2019-07 and 2019-09 demonstrate the linkage of constituent concentrations between the alternate source (brine) and downgradient wells.

TABLE 5-1: COMPARISON OF BRINE IMPACTED BEDROCK TO DOWNGRADIENT WELL 9631

Analyte	Units	Maximum Brine-Impacted Groundwater in Upgradient Bedrock RWL/FAR (As measured at 2019-07 and 2019-09)	Monitoring Well 9631
Calcium	mg/L	1,200	1,500
Chloride	mg/L	23,000	30,000
TDS	mg/L	26,000	38,000

Notes: RWL/FAR = Residual Waste Landfill/Fly Ash Reservoir; mg/L = milligrams per liter
Results from groundwater samples collected in March and April 2025.

6. DATA DOES NOT INDICATE THAT THE RWL/FAR IS THE SOURCE

6.1 GEOCHEMICAL SIGNATURES

The geochemical fingerprints of landfill leachate from the RWL and downgradient well 9631 were evaluated using the concentrations of Appendix III parameters. Landfill leachate is characterized by elevated concentrations of boron, chloride, and sulfate – concentrations of these parameters in groundwater from well 9631 and leachate from Ponds 1 and 2 are shown in Figure 6-1. These parameters were selected due to their elevated concentrations in site landfill leachate, their elevated solubility in water, limited potential for sorption, and limited potential for transformations due to changes in redox conditions.

The samples presented in these time series plots were collected from 2010 through 2025. The primary observations based on these plots are the following.

- Sulfate is consistently one-to-two orders of magnitude higher in landfill leachate than in groundwater from monitoring well 9631. The increasing concentrations of calcium, chloride, and TDS in groundwater from well 9631 were not accompanied by an increase in sulfate concentrations. Given the elevated concentrations of sulfate in landfill leachate, a release from the landfill could not occur without a concurrent increase in the concentration of sulfate in downgradient wells.
- In contrast, chloride has been consistently higher at monitoring well 9631 than in landfill leachate. The brine signature was first observed at monitoring well 9631 in February 2024. Since this initial observation, samples have been collected eleven times between February 2024 and March 2025. Chloride concentrations increased sharply compared to data collected earlier, but have remained stable since the increase in chloride was initially observed. A release of landfill leachate and subsequent mixing with groundwater would result in a decrease in the concentration of chloride in groundwater from monitoring well 9631, which did not occur.
- Boron is consistently an order of magnitude higher in landfill leachate than in groundwater collected from monitoring well 9631. The increasing concentrations of calcium, chloride, and TDS in groundwater from well 9631 were not accompanied by an increase in boron concentrations. Boron is expected to act as a conservative tracer due to its high solubility and mobility in water. Therefore, a release of landfill leachate would result in an increase in boron concentrations, which was not observed from 2010 through spring 2025.

A release from the RWL/FAR would result in increasing concentrations of boron and sulfate and decreasing concentrations of chloride at monitoring well 9631. In contrast, chloride has increased since 2021 while boron and sulfate have remained stable. Further, a release from the RWL/FAR would need to migrate from the surface through the Morgantown Sandstone before concentrations would increase in the Cow Run Sandstone. SSIs were not detected in any downgradient wells screened in the Morgantown Sandstone.

Based on the data summarized above and the chemical signatures of the groundwater at issue, the RWL/FAR is not deemed to be the source of the SSIs.

7. ALTERNATE SOURCE DATA ARE HISTORICALLY CONSISTENT WITH HYDROGEOLOGIC CONDITIONS AND FINDINGS OF THE MONITORING PROGRAM

7.1 REGIONAL BRINE

The existence of Regional Brine in the area surrounding the plant is supported by historical studies and data. Regional groundwater flow regimes through fractured bedrock upgradient of the RWL/FAR were established after the last deglaciation, which occurred approximately 14,000 years ago (Hansen 2017). Enhancement of transmissivity in Ohio River Valley from stress-relief fracturing in bedrock provides conditions for bedrock to be interconnected to coarse glacial outwash alluvial deposits (USGS 1981; USGS 1997). Regional groundwater within the fractured sedimentary bedrock in the Ohio River Valley generally flows from areas of higher topographic elevation towards areas of lower elevation, ultimately discharging to the Ohio River (ORSANCO 1984). Assuming a conservatively high effective porosity of 1 percent, estimated groundwater velocity values for the Morgantown Sandstone and Cow Run Sandstone units are approximately 77 to 79 feet per year and 31 to 32 feet per year, respectively. These flow rates would allow ample time for groundwater to migrate from upgradient regional background sources to Plant property. The data supporting these conclusions are historically consistent with hydrogeologic conditions and findings of the RWL/FAR monitoring program.

The discharge of brine is seen at a regional scale along the Ohio River with shallow wells near the Ohio River observing saltwater impacts; whereas, further from the Ohio River shallow wells report little to no brine impacts (USGS 1997). TDS concentrations observed in bedrock wells around the RWL/FAR are consistent with observations seen at brine-freshwater mixing zones at other brine-impacted sites (Yager et al. 2017). The regional and site-specific data are in strong agreement, and demonstrate that regional brines are discharging under the RWL/FAR and mixing with Cow Run groundwater underneath the RWL/FAR.

8. CONCLUSIONS

The SSIs identified in this ASD Report are based on results from downgradient RWL/FAR monitoring well samples collected from February to April 2025. Review of data for quality assurance and statistical comparison was completed on June 4, 2025. In response to the SSIs, this ASD Report was prepared and certified by September 2, 2025, in accordance with 40 CFR § 257.94(e)(2).

SSIs in the downgradient RWL/FAR monitoring well 9631 have been determined to result from alternate sources based on analysis of the gathered data: discharge of regional brine present in bedrock. Table 8-1 summarizes the six lines of evidence for each of the SSIs.

In conclusion, the RWL/FAR is not the source of the SSIs associated with the second semiannual sampling event groundwater results for 2025. Thus, Gavin will continue detection monitoring at the RWL/FAR in accordance with 40 CFR § 257.94(e)(2).

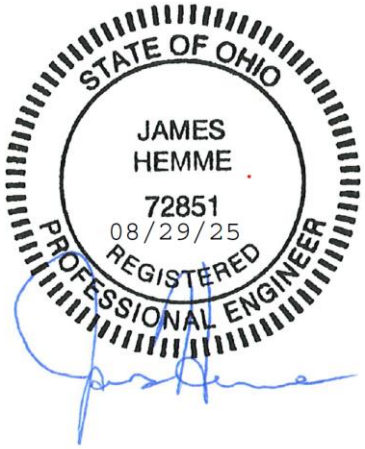
TABLE 8-1: RWL/FAR ASD SUMMARY

Analyte	SSI Location	Six Lines of Evidence from USEPA Guidance					
		Alternate Source	Hydraulic Connection	Constituent Present at Source or along Flow Path	Constituent Distribution More Strongly Linked to Alternate Source	Constituent Could Not Have Resulted from the RWL/FAR	Data Are Historically Consistent with Hydrogeologic Conditions
Calcium	9631	Regional Brine	X	X	X	X	X
Chloride	9631	Regional Brine	X	X	X	X	X
TDS	9631	Regional Brine	X	X	X	X	X

Notes: RWL/FAR = Residual Waste Landfill/Fly Ash Reservoir; SSI = statistically significant increase; USEPA = United States Environmental Protection Agency.

9. PROFESSIONAL ENGINEER CERTIFICATION

I hereby certify that I, or an agent under my review, have prepared this Alternate Source Demonstration Report for the Residual Waste Landfill/Fly Ash Reservoir and it meets the requirements of 40 CFR § 257.94(e)(2). To the best of my knowledge, the information contained in this Report is true, complete, and accurate.



James A. Hemme, P.E.
State of Ohio License No.: 72851

Date: 8/29/2025

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FIGURES

Figure 1-1: Gavin Plant Location
Gavin Generating Station
Cheshire, Ohio

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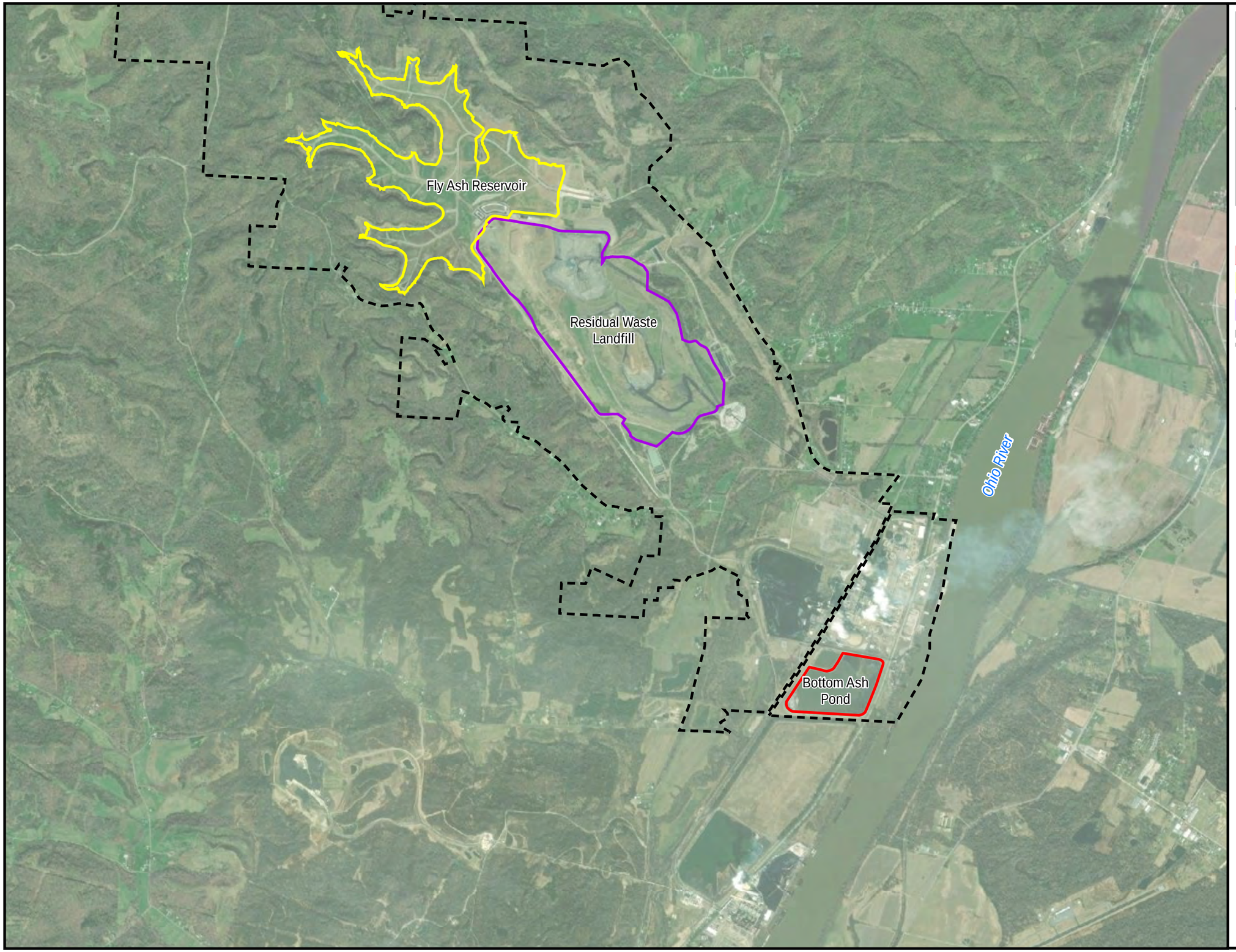

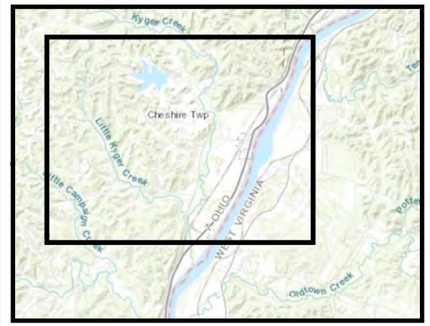

Legend

- Bottom Ash Pond
- Fly Ash Reservoir
- Residual Waste Landfill
- Property Boundary

NOTES:
1. Aerial Imagery: ESRI World Imagery
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N

0 500 1,000 2,000 3,000 4,000
Feet

Figure 1-2: RWL and FAR Locations
Gavin Generating Station
Cheshire, Ohio

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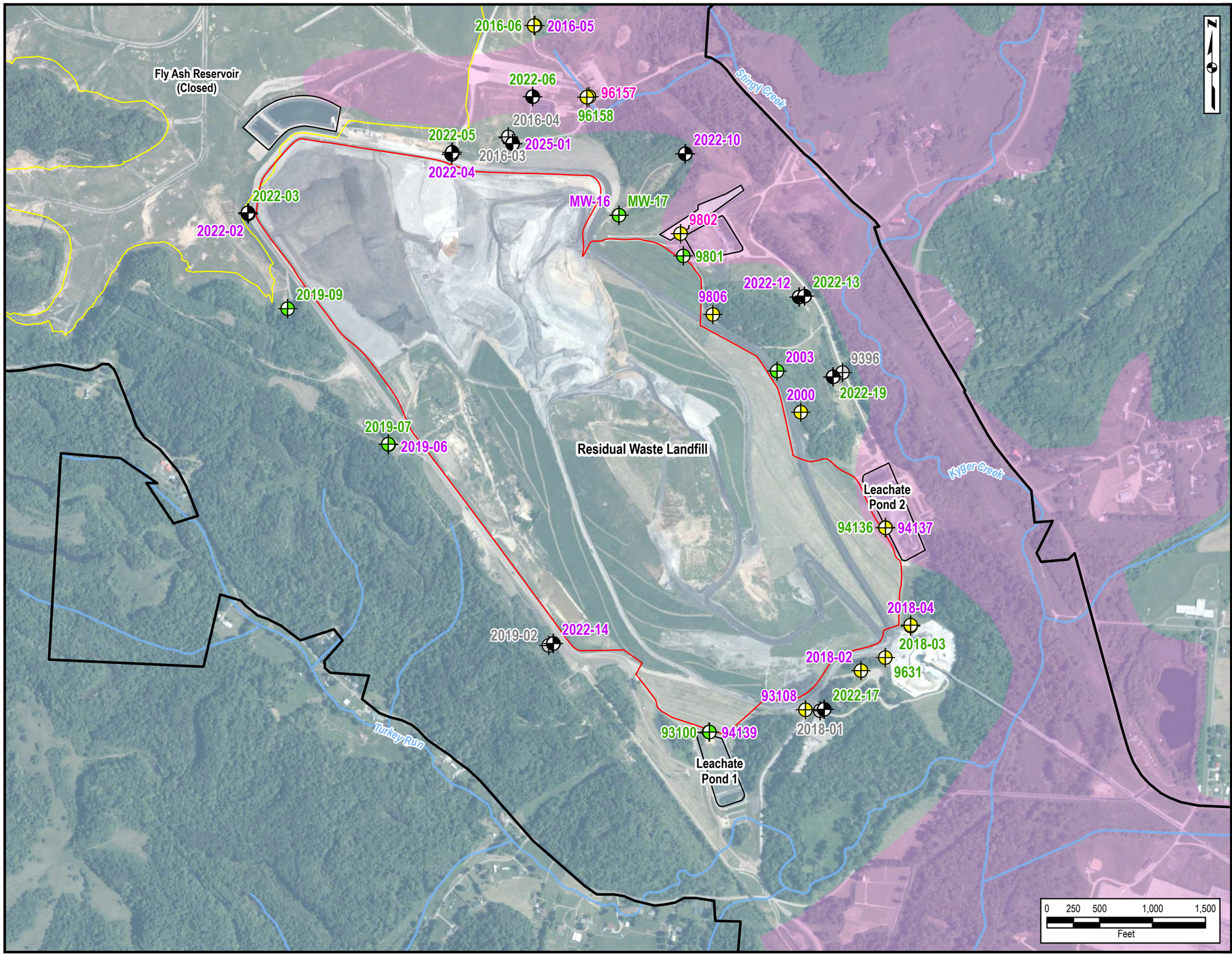


Legend

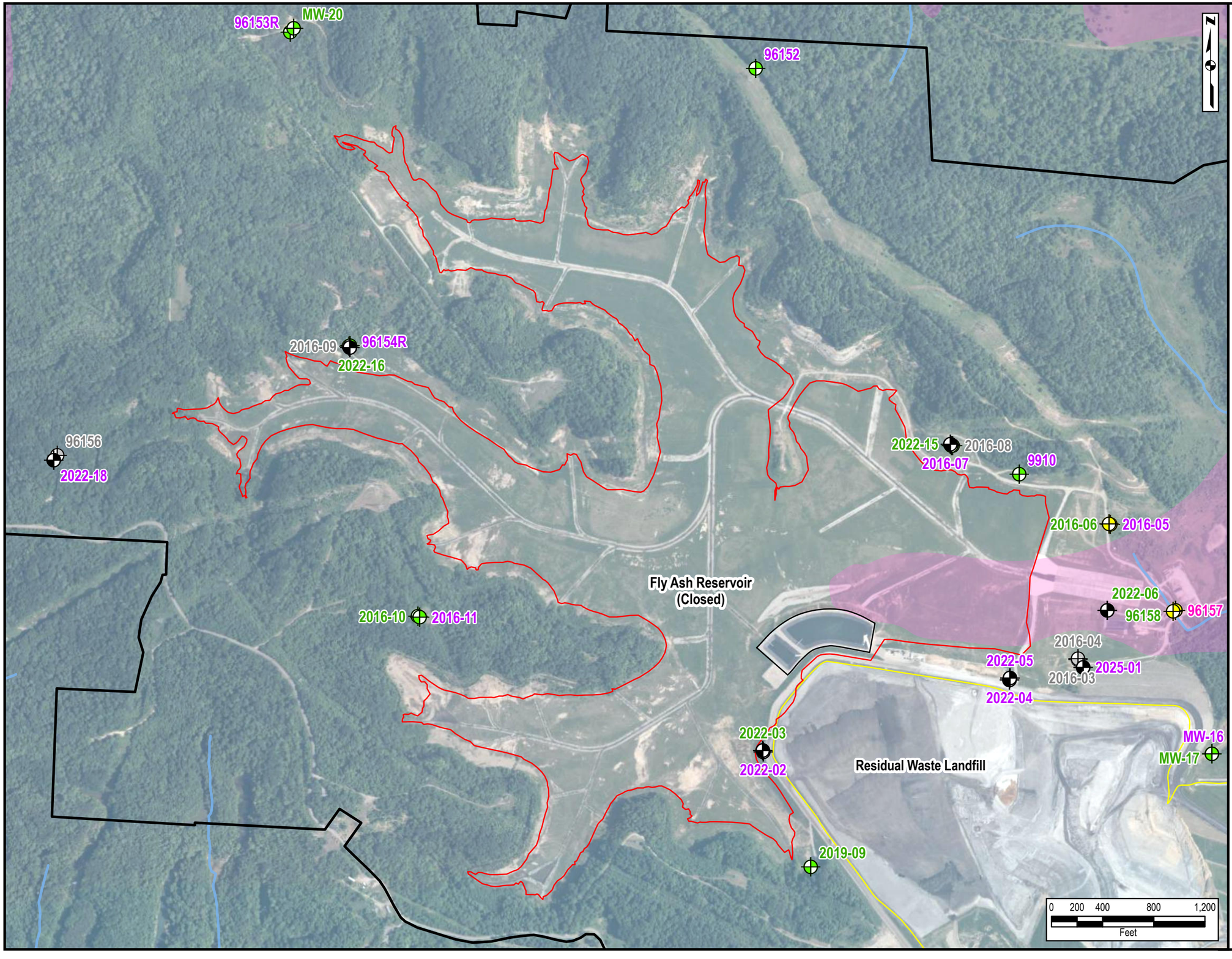
- Federal Upgradient Monitoring Well
- Federal Downgradient Monitoring Well
- Supplemental Monitoring Well (Under Evaluation for Inclusion in Network)
- Abandoned Well
- Stream/Creek
- Pond Area
- Residual Waste Landfill
- Fly Ash Reservoir
- Gavin Property Boundary
- Interpreted area where the Morgantown Sandstone has been eroded and is not present (based on borehole logs and topographic analysis)
- 94138 Alluvium Monitoring Well
- 93108 Morgantown Monitoring Well
- 93105 Cow Run Monitoring Well
- 96156 Abandoned Well

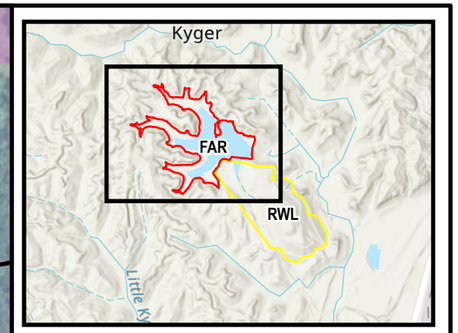
NOTES:

1. Aerial Imagery: USDA National Agriculture Imagery Program (NAIP), May 2023

Figure 1-3: Federal Monitoring Well Locations
Residual Waste Landfill Area
Gavin Power, LLC
Cheshire, Ohio

ERM





Legend

- Federal Upgradient Monitoring Well
- Federal Downgradient Monitoring Well
- Supplemental Monitoring Well (Under Evaluation for Inclusion in Network)
- Abandoned Well
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- Pond Area
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- 93105 Cow Run Monitoring Well
- 96156 Abandoned Well

NOTES:

1. Aerial Imagery: USDA National Agriculture Imagery Program (NAIP), May 2023

Figure 1-4: Federal Monitoring Well Locations
Fly Ash Reservoir Area
Gavin Power, LLC
Cheshire, Ohio

ERM

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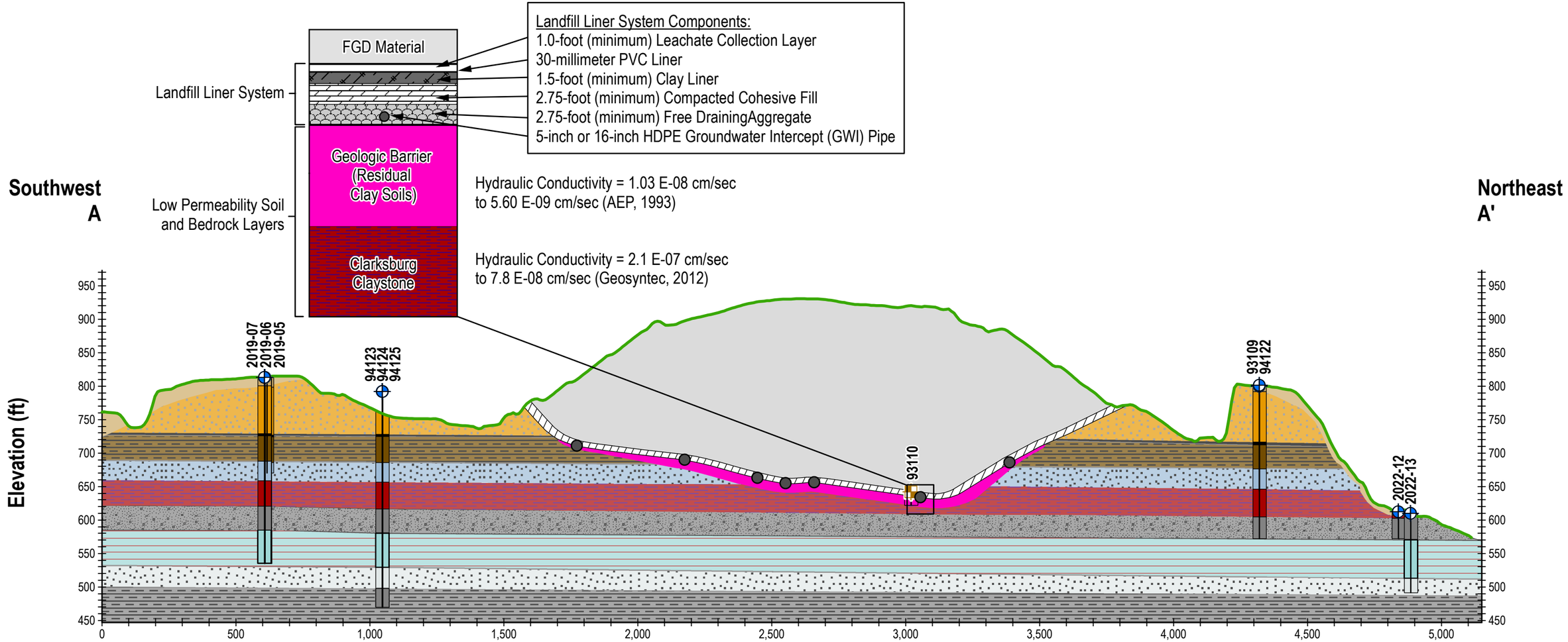

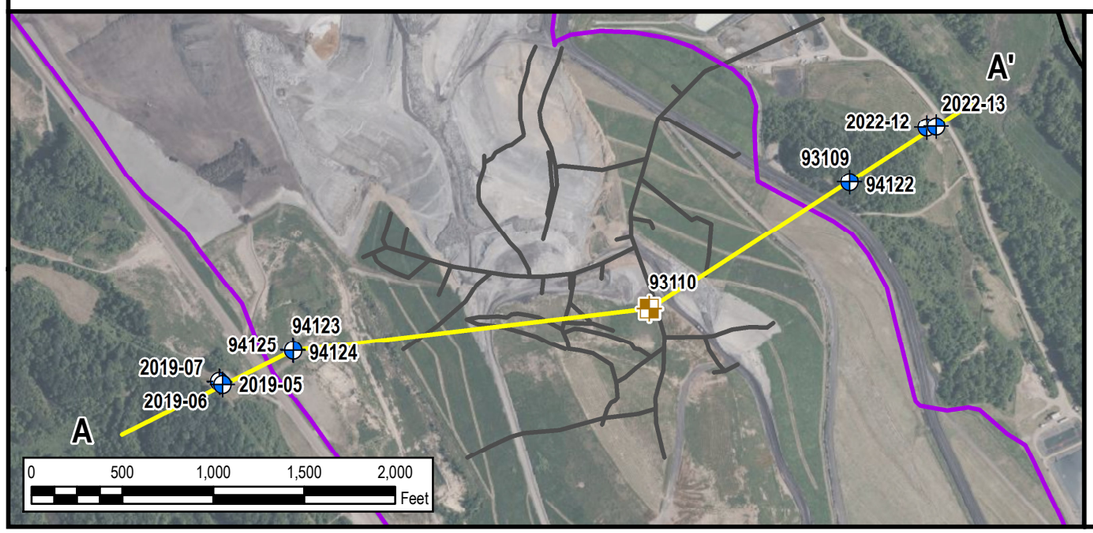

Legend

- Monitoring Well
- Soil Boring
- Groundwater Intercept (GWI) Infrastructure
- Surface Profile - 2022
- Boring Trace
- Cross-section Transect
- Approximate GWI Piping
- Proposed Limit of Waste
- Site Boundary
- Landfill Liner System

Generalized Lithology

- Overburden/Fill
- FGD Material
- Geologic Barrier (Residual Clay Soils)
- Pomeroy Sandstone
- Pomeroy Coal
- Undifferentiated Pittsburgh
- Connellsville Sandstone
- Clarksburg Claystone
- Morgantown Sandstone
- Round Knob Shale
- Cow Run Sandstone
- Anderson/Bloomfield/Buffalo Clayshale

Figure 1-5: Geologic Cross Section A-A'
Gavin Power, LLC
Cheshire, Ohio

NOTE:

1. To more clearly illustrate geologic features, the Elevation (Y axis) scale is exaggerated 2.5x compared with the Distance Along Transect (X axis) scale, though both axes use feet as theunit of measurement.
2. Boring surface elevations, ground surface elevations and esitmated bedrock surface are projected along transect line.
3. The geology is generalized based on the lithology descriptions.
4. GWI piping shown to scale on inset figure depicting Landfill Liner System Components. GWI piping diameter exaggerated on Section to depict locations of piping infrastructure intersecting Section line.
5. Aerial Imagery from ESRI World Imagery Reproduced under license in ArcGIS 10.8.

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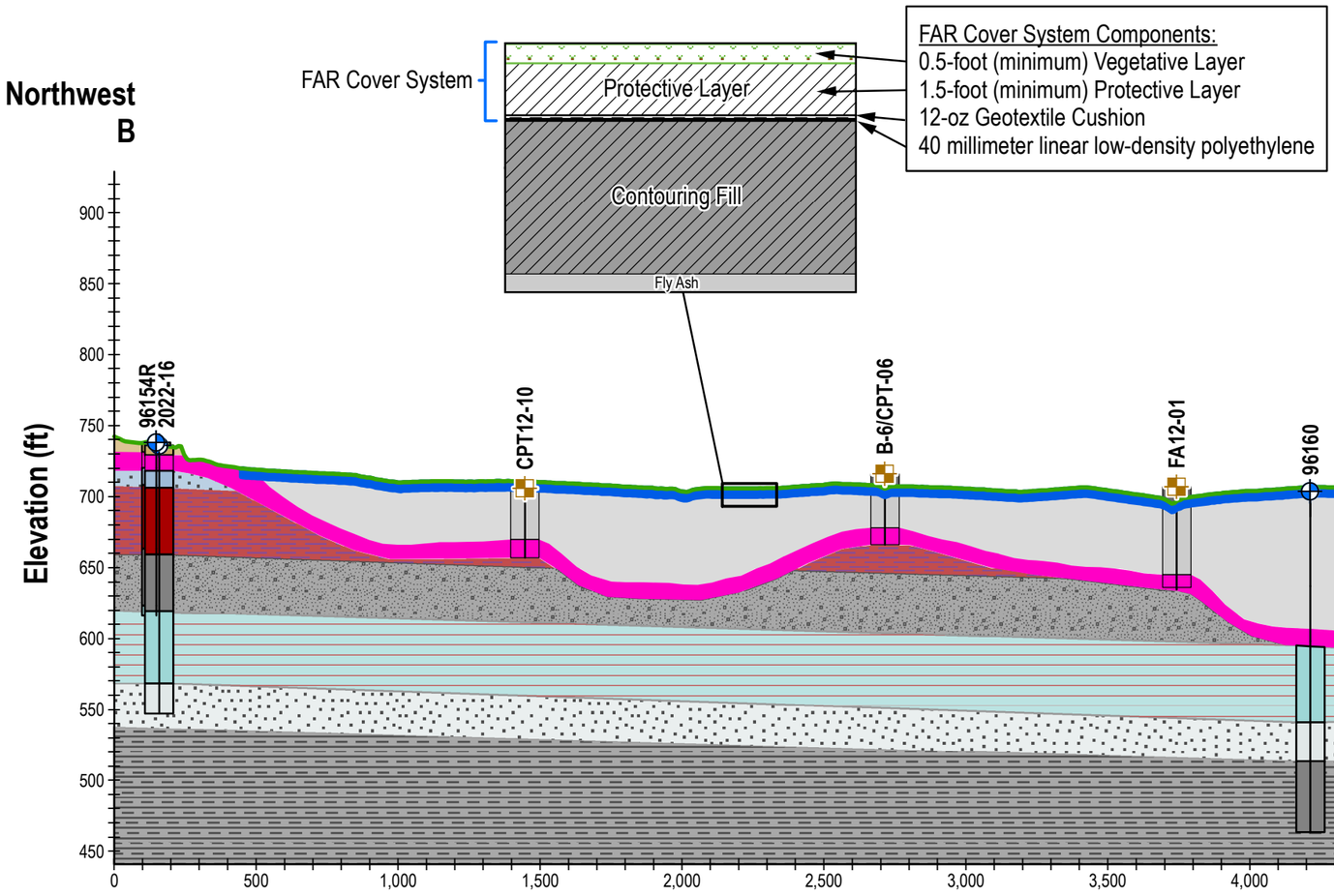

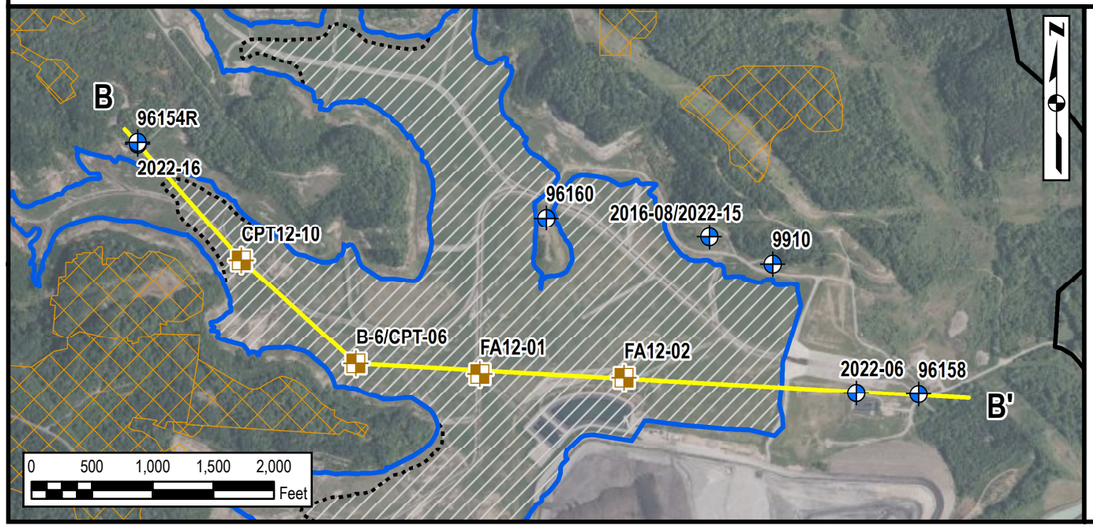

Legend

- Monitoring Well
- Soil Boring/CPT Location
- Surface Profile - 2022
- FAR Cover System
- Boring Trace
- Cross-section Transect
- Extent of Fly Ash
- Extent of FAR Cover System
- Historic Mining Area
- Site Boundary

Generalized Lithology

- Overburden
- Fly Ash
- Clay Core
- Fill
- Residual Clays
- Connellsville Sandstone
- Clarksburg Claystone
- Morgantown Sandstone
- Round Knob Shale
- Cow Run Sandstone
- Anderson/Bloomfield/Buffalo Clayshale

Figure 1-6: Geologic Cross Section B-B'
Gavin Power, LLC
Cheshire, Ohio

NOTE:

1. To more clearly illustrate geologic features, the Elevation (Y axis) scale is exaggerated 5x compared with the Distance Along Transect (X axis) scale, though both axes use feet as the unit of measurement.
2. Boring surface elevations, ground surface elevations and esitmated bedrock surface are projected along transect line.
3. The geology is generalized based on the lithology descriptions.
4. Aerial Imagery from ESRI World Imagery Reproduced under license in ArcGIS 10.8.

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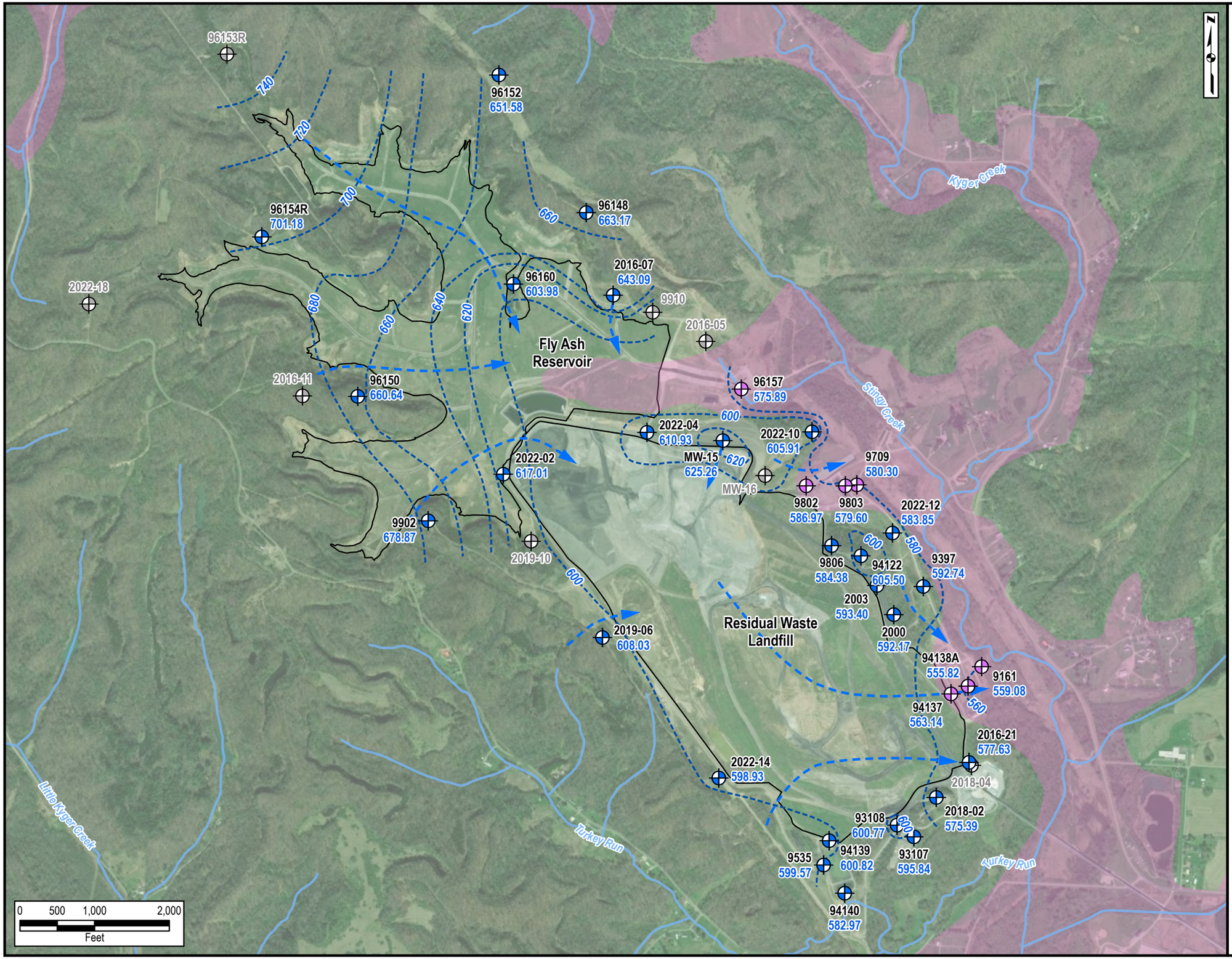
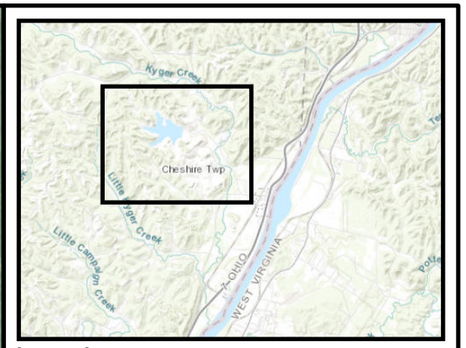




Legend

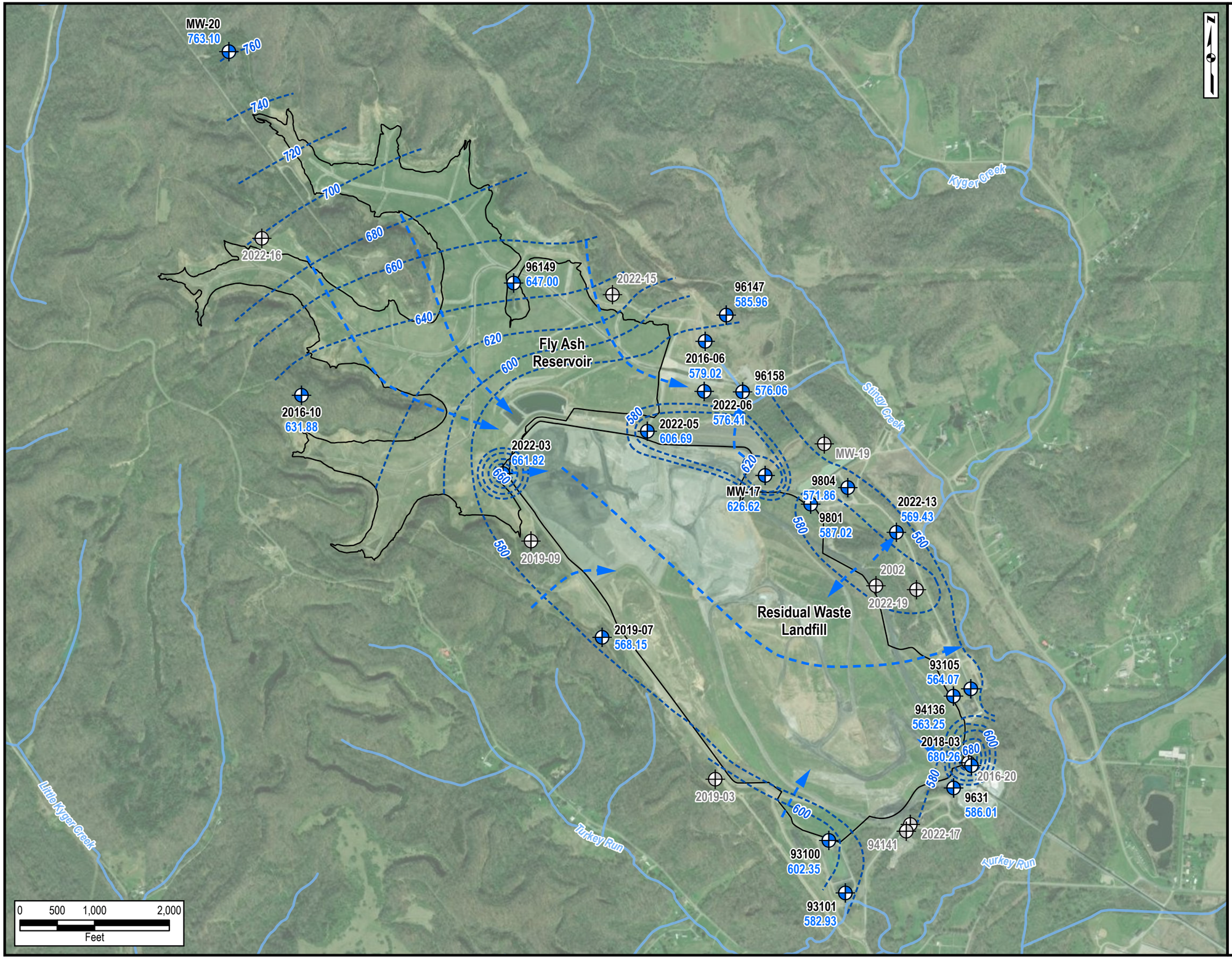
- Morgantown Sandstone Monitoring Well
- Morgantown Sandstone Monitoring Well - Low Recharge, Dry, Data Anomaly, or Not Gauged
- Alluvium Monitoring Well
- 605.82 Groundwater Elevation (ft)
- H1 2025 Interpreted Groundwater Potentiometric Contour
- H1 2025 Interpreted Generalized Groundwater Flow Direction
- Stream/Creek
- Coal Combustion Residual Unit
- Interpreted area where the Morgantown Sandstone has been eroded and is not present (based on borehole logs and topographic analysis)

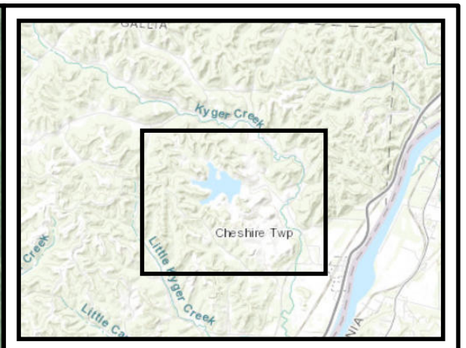
NOTES:

- Interpreted contours based on groundwater gauging conducted on 2/24/2025 - 2/25/2025.
- Some groundwater elevation contours were interpreted using historical groundwater trends in monitoring wells that were not gauged in February 2025.
- Where the Morgantown SS is absent, the contours represent the potentiometric surface in the alluvial aquifer because these aquifers are hydraulically connected.
- H1 refers to the first half of 2025.

Figure 1-7: Morgantown Sandstone Groundwater Flow Directions
H1 2025
Gavin Power, LLC
Cheshire, Ohio

ERM





Legend

- Cow Run Sandstone Monitoring Well
- Cow Run Sandstone Well - Low Recharge, Dry, or Data Anomaly
- 605.82 Groundwater Elevation (ft)
- H1 2025 Interpreted Groundwater Potentiometric Contour
- H1 2025 Interpreted Generalized Groundwater Flow Direction
- Stream/Creek
- Coal Combustion Residual Unit

NOTES:

- Cow Run Sandstone is present through entire site.
- Interpreted contours based on groundwater gauging conducted on 2/24/2025 - 2/25/2025.
- Some groundwater elevation contours were interpreted using historical groundwater elevation trends in monitoring wells that were not gauged in February 2025.
- H1 refers to the first half of 2025.

Figure 1-8: Cow Run Sandstone Groundwater Flow Directions H1 2025
Gavin Power, LLC
Cheshire, Ohio

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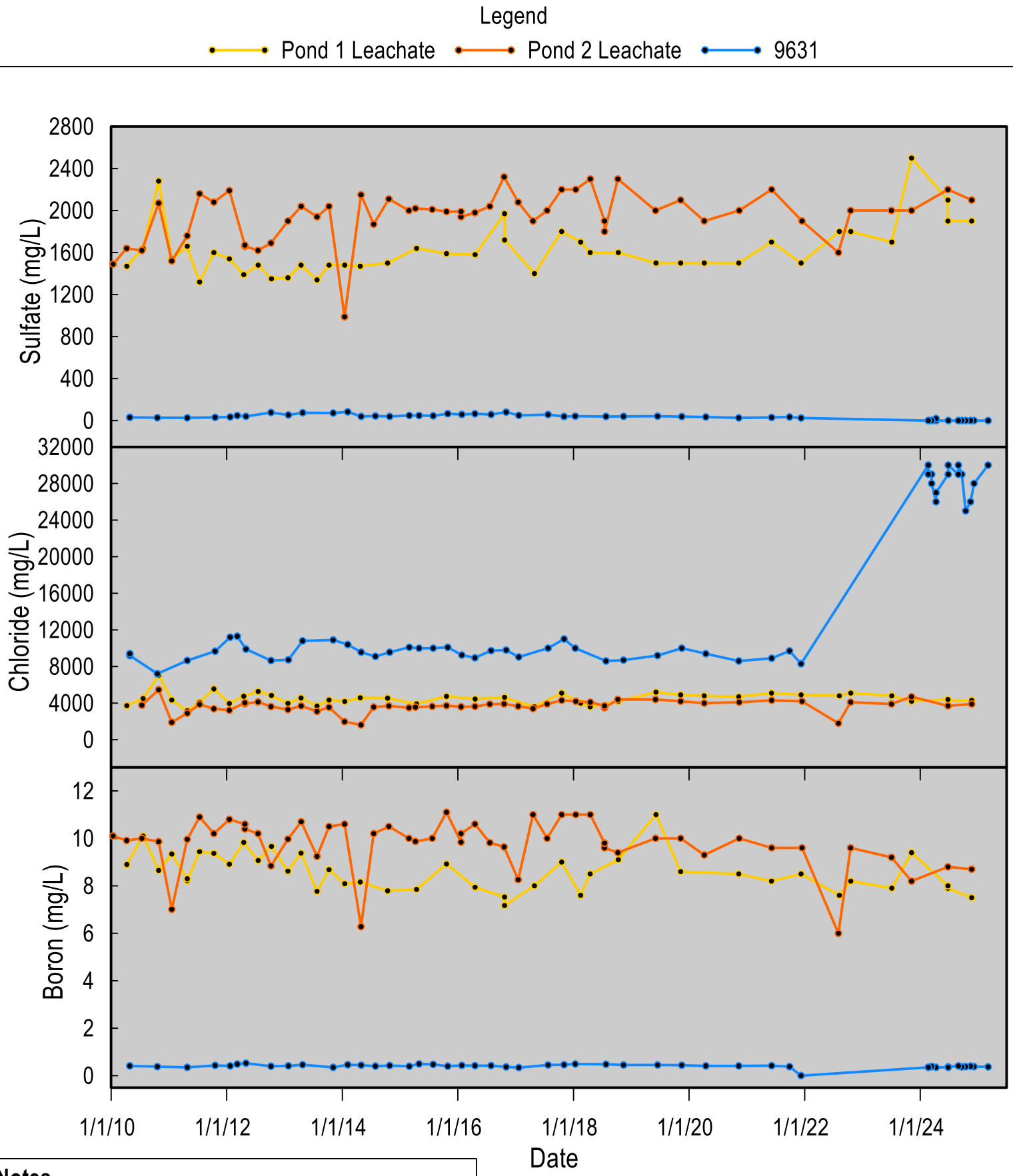

Notes

1. Date range January 2010 to March 2025.
2. Figure includes data collected under both Federal CCR Program and Ohio State Sampling Program.
3. Non-detects are plotted as zero.
4. Anomalous boron data for Pond 1 Leachate on 4/16/2020 omitted.

Figure 6-1. Boron, Chloride, and Sulfate in Brine Impacted Wells and Landfill Leachate
Gavin Generating Station
Cheshire, Ohio

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APPENDIX D GAVIN RESIDUAL WASTE LANDFILL AND FLY ASH POND SECOND SEMIANNUAL SAMPLING EVENT OF 2025 ASD REPORT

Second Semiannual Sampling Event of 2025 Alternate Source Demonstration Report

Gavin Residual Waste Landfill and Fly Ash Reservoir

PREPARED FOR
Gavin Power, LLC

DATE
31 January 2026

REFERENCE
0767401

SIGNATURE PAGE

Second Semiannual Sampling Event of 2025 Alternate Source Demonstration Report

Gavin Residual Waste Landfill and Fly Ash Reservoir

0767401

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ACRONYMS AND ABBREVIATIONS

Acronym	Description
AEP	American Electric Power Service Corporation
ASD	Alternate Source Demonstration
BAP	Bottom Ash Pond
CCR	Coal Combustion Residuals
CFR	Code of Federal Regulations
cm/sec	centimeters per second
ERM	Environmental Resources Management, Inc.
FAR	Fly Ash Reservoir
Gavin	Gavin Power, LLC
GWI	Groundwater intercept
K	Hydraulic Conductivity
H2	Second Semiannual
mg/L	milligrams per liter
ODNR	Ohio Department of Natural Resources
ORSANCO	Ohio River Valley Water Sanitation Commission
Plant	General James M. Gavin Power Plant
SSI	Statistically significant increase
TDS	Total Dissolved Solids
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey

1. INTRODUCTION

1.1 REGULATORY AND LEGAL FRAMEWORK

In accordance with Title 40 Code of Federal Regulations (CFR), Part 257, Subpart D – Standards for the Disposal of Coal Combustion Residuals (CCR) in Landfills and Surface Impoundments (CCR Rule) – Gavin Power, LLC (Gavin) has been implementing the groundwater monitoring requirements of 40 CFR § 257.90 et seq. for the Residual Waste Landfill (RWL) and Fly Ash Reservoir (FAR) at the General James M. Gavin Power Plant (Plant) using a combined groundwater monitoring network for the RWL and FAR. Gavin calculated background levels and conducted statistical analyses for Appendix III constituents in accordance with 40 CFR § 257.93(h). Currently, Gavin is performing detection monitoring at the RWL and FAR in accordance with 40 CFR § 257.94.

Statistically significant increases (SSIs) over background concentrations were detected in one downgradient monitoring well for some Appendix III constituents for the second semiannual (H2) groundwater sampling event of 2025 and are explained in this Alternate Source Demonstration (ASD) Report. The second semiannual groundwater sampling event of 2025 was performed from September 10, 2025 to October 27, 2025. Review of data for quality assurance and statistical comparison was completed on January 13, 2026. Pursuant to 40 CFR § 257.94(e)(1), Gavin must establish an assessment monitoring program for the combined RWL/FAR groundwater monitoring system unless an ASD is completed and certified by a Professional Engineer within 90 days. Pursuant to 40 CFR § 257.94(e)(2), this ASD Report, which has been completed and certified by January 31, 2026, will be included with the annual groundwater monitoring and corrective action report required under CFR § 257.90(e), which is due January 31, 2026.

An SSI for one or more Appendix III constituents is a *potential* indication of a release of constituents from a CCR unit to groundwater. In the event of an SSI, the CCR Rule provides that "… the owner or operator may demonstrate that a source other than the CCR unit caused the SSI over background levels for a constituent or that the SSI resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality…" (40 CFR § 257.94(e)(2)). If it is demonstrated that the SSI is the result of a source other than the CCR unit, then the CCR unit may remain in the Detection Monitoring Program instead of transitioning to an Assessment Monitoring Program. To implement this demonstration, an ASD must be made in writing and the accuracy of the information must be verified through certification by a qualified Professional Engineer (40 CFR § 257.94(e)(2)).

The United States Environmental Protection Agency (USEPA) guidance document, "Solid Waste Disposal Facility Criteria Technical Manual, EPA530-R-93-017, Subpart E" (USEPA 1993), specifies the following six lines of evidence that must be addressed to determine whether an SSI resulted from a source other than the regulated disposal unit:

- An alternative source exists;

- A hydraulic connection exists between the alternative source and the well with a statistically significant increase;
- Constituent(s) (or precursor constituents) are present at the alternative source or along the flow path from the alternative source prior to possible release from the unit;
- The relative concentration and distribution of constituents in the zone of contamination are more strongly linked to the alternative source than to the unit when the fate and transport characteristics of the constituents are considered;
- The concentration observed in groundwater could not have resulted from the unit given the waste constituents and concentrations in the unit leachate and wastes, and the site hydrogeologic conditions; and
- The data supporting conclusions regarding the alternative source are historically consistent with the hydrogeologic conditions and findings of the monitoring program.

Environmental Resources Management, Inc. (ERM) has prepared this ASD Report on behalf of Gavin to address each of these lines of evidence for the SSIs detected in groundwater collected from downgradient compliance wells at the RWL and FAR. The groundwater monitoring program and ASD have been prepared utilizing accepted practices incorporating regional information that has been confirmed with site specific measurements.

Some of the topics discussed in this report are also addressed in USEPA's November 22, 2022 Final Decision: Denial of Alternative Closure Deadline for General James M. Gavin Plant, Cheshire, Ohio (Final Denial). In other documents, Gavin has explained how the approaches described and documented in this report are consistent with USEPA regulations and guidance as well as with best engineering practices and judgment. Gavin has contested USEPA's findings in the Final Denial from a factual, technical and legal perspective.

1.2 BACKGROUND

The Plant is a coal-fired generating station located in Cheshire, Gallia County, Ohio (Figure 1-1), and is bounded to the east by the Ohio River. The RWL and FAR are two of three CCR units at the Plant that are subject to regulation under the CCR Rule (the third unit is the Bottom Ash Pond [BAP], but that unit is not the focus of this report). The RWL is approximately 400 acres in size and is located about 1.25 miles northwest of the Plant (Figure 1-2). The CCR material disposed of in the RWL is Flue Gas Desulfurization byproduct (consisting of scrubber cake, fly ash, and lime) and other approved materials (water treatment sludge, bottom ash, lime ball mill rejects, coal pulverizer rejects, and sand/moss from the vertical flow wetlands).

The FAR is approximately 300 acres in size and is located about 2.5 miles northwest of the Plant (Figure 1-2). From the mid-1970s until January 1995, fly ash was sluiced to the FAR and the settled CCR materials in the FAR were retained behind the Stingy Run Fly Ash Dam that formed the FAR. The FAR was closed in place, and the closure was completed in 2021. Closure was certified on July 30, 2021.

An updated combined groundwater monitoring system was certified in August 2021 to collectively monitor for potential releases from the RWL and FAR. Previously, Gavin maintained and monitored two separate (though adjacent) groundwater monitoring networks for the RWL and FAR, respectively. The combined monitoring network was certified on 31 August 2021 with completion of the Updated Groundwater Monitoring System Evaluation and Certification—40 CFR 257.91 (ERM 2021).

The combined certified network which monitors both the RWL (Figure 1-3) and FAR (Figure 1-4) currently includes 24 upgradient and 15 downgradient monitoring wells located in the Alluvium, Morgantown Sandstone, and Cow Run Sandstone. The upgradient wells are placed to accurately represent the quality of background groundwater that has not been affected by any potential leakage from the RWL and FAR units, while the downgradient wells in the network are positioned at the downgradient boundary of waste to detect potential release of CCR constituents from the CCR units into groundwater in the uppermost aquifer.

Consistent with the CCR Rule and with Gavin's Statistical Analysis Plan (ERM 2017), an interwell prediction limit approach was used to identify potential impacts to groundwater. Upper prediction limits were developed for the Appendix III parameters; in the case of pH, a lower prediction limit was also developed. Documentation of the development of the upper prediction limits and lower prediction limit is provided in the 2018 Alternate Source Demonstration for the RWL (ERM 2018b).

In 2022, six new monitoring wells were installed around the RWL and FAR to act as replacements for previously existing monitoring wells that were part of the certified monitoring network but that had to be removed as a result of a variety of factors, including landfill expansion activities. Another eight new wells were installed in 2022 around the RWL and FAR to monitor groundwater in between existing monitoring well locations. Gauging of water levels and collection of samples for laboratory analysis has been performed at these wells since their installation. Two additional monitoring wells (2025-01 and 2025-03) were installed in 2025 to replace damaged wells. Monitoring well 2025-01 is located to the southeast of the FAR, while monitoring well 2025-03 is located to the north of the FAR. Both wells are screened in the Morgantown Sandstone. These wells are under evaluation for inclusion in the certified monitoring well network.

1.3 GEOLOGY AND HYDROGEOLOGY

The shallowest geologic materials at the FAR/RWL include mine spoil, fill, residual fine-grained soils, and weathered and fractured bedrock (ERM 2021a). Measured hydraulic conductivities for residual fine-grained soils range from 1.03×10^{-8} centimeters per second (cm/sec) to 5.60×10^{-9} cm/sec (AEP, 1993). The shallowest weathered and fractured bedrock present at the Site includes the Pomeroy Sandstone and Coal, the Pittsburgh Sandstone and Coal, the Bellaire Sandstone, and the Connellsville Sandstone units. Although some of these units may be partially or fully saturated in the vicinity of the FAR and RWL, these formations generally are not capable of yielding usable quantities of groundwater, and thus are not considered part of the uppermost aquifer at the FAR/RWL. In the vicinity of the Site, bedrock dips to the southeast at approximately 17 feet/mile (AEP 1993).

The Connellsville Sandstone is still present in portions of the ridges that surround the FAR valley and the RWL. However, the Connellsville Sandstone has been completely eroded in substantial portions of the valley areas of the FAR, especially at the eastern extent of the FAR nearest the current extent of Stingy Run. The Connellsville Sandstone has also been partially or completely eroded in portions of the valley areas underlying the RWL.

Beneath the Connellsville Sandstone are the Clarksburg Red Beds, which is a regionally extensive aquitard (low-permeability rock layer) with a typical thickness of approximately 40 to 50 feet and average hydraulic conductivity values for the formation ranging from 2.1×10^{-7} cm/sec to 7.8×10^{-8} cm/sec (Geosyntec, 2012). The Clarksburg Red Beds hydraulically isolate the shallower bedrock formations from the underlying aquifers. The Clarksburg Red Beds have been observed to be partially or entirely eroded in portions of the valley areas of the FAR and RWL (Figures 1-5 and 1-6), especially in the eastern extent of the FAR valley areas. However, residual fine-grained soils generated in-situ by the weathering process are generally present in areas where erosion of the Clarksburg Red Beds has occurred. Based upon measured hydraulic conductivity values for the residual fine-grained soils (1.03×10^{-8} cm/sec to 5.60×10^{-9} cm/sec), these soils provide hydraulic separation similar to that provided by the Clarksburg Red Beds. Beneath the Clarksburg Red Beds are the Morgantown Sandstone and the Cow Run Sandstone. Together these units are interpreted as the uppermost aquifer beneath the RWL and FAR (Geosyntec 2016a; Geosyntec 2016b).

The Morgantown Sandstone is composed of two thin sandstone beds (upper and lower), which are separated by clay shale. The Morgantown Sandstone unit has a total average thickness of approximately 30 feet, and the upper and lower sandstone beds generally range in thickness from approximately three to seven feet. It has been documented through review of historical boring logs that the Morgantown Sandstone has been removed by erosion and is absent in portions of the Stingy Run and Kyger Creek valley areas. The Morgantown was also confirmed to be absent at boring 2022-06, which was advanced in 2022 in the Stingy Run valley at the northeastern end of the RWL (ERM 2024). Groundwater migrating east-southeast within the Morgantown Sandstone along the eastern portion of the RWL discharges to the alluvial aquifer located within the Stingy Creek and Kyger Creek valleys. Thus, the alluvial aquifer is also considered part of the uppermost aquifer where the Morgantown Sandstone is absent in these areas.

Below the Morgantown Sandstone is a unit of approximately 60 feet of interbedded claystone/clay shale and non-crystalline limestone layers, collectively known as the Round Knob Shale. These strata extend to the top of the underlying Cow Run Sandstone. Together, the residual fine-grained soils, the Clarksburg Red Beds, and the Round Knob Shale unit provide hydraulic separation from the aquifers underlying the RWL. Though the Clarksburg Red Beds have been partially or entirely eroded in portions of the FAR valley areas, the residual fine-grained soils and deeper Round Knob Shale unit provide hydraulic separation from the aquifers underlying the FAR similar to that provided by the collective lithologic units underlying the RWL.

Below the Round Knob Shale, the Cow Run Sandstone has an average thickness of 30 feet and is characterized regionally as a coarse-grained sandstone and sandy shale. The Cow Run Sandstone unit is continuous under the FAR/RWL and considered the base of the uppermost aquifer. Beneath

the Cow Run Sandstone are the Portersville Limestone and the Anderson Clayshale which consist primarily of shale, claystone, and clay shale (Geosyntec 2012). These low permeability formations are interpreted to be the lower hydraulic boundary of the uppermost aquifer.

1.3.1 GROUNDWATER FLOW

The removal of strip mine ponds, installation of groundwater intercept (GWI) drains, and placement of the composite liner under the RWL resulted in decreased recharge to the Morgantown Sandstone and Cow Run Sandstone. The changes during and post-construction were interpreted to result in the decline of potentiometric elevations up to 10 feet, which is similar to observed declines at another AEP residual waste landfill (AEP 1993).

At a regional scale, groundwater within the Morgantown Sandstone and Cow Run Sandstone generally flows from the northwest to the southeast under the FAR and the RWL toward the Ohio River, which is the primary regional discharge boundary for groundwater. At Site-scale, several factors influence groundwater flow directions in the area of the FAR/RWL, including topographic ridges and suppression of infiltration related to the FAR cap and the liner system of the RWL. Ridges along the western, eastern, and southern perimeters of the RWL constitute areas of recharge. Due to removal of strip mine ponds, installation of GWI drains, and placement of the composite liner, recharge to the center of the RWL has been cut off (AEP, 1993). Recent potentiometric surface maps, including those prepared for this report (Figures 1-7 and 1-8), incorporate not only the information from existing monitoring wells but also consider additional relevant data including original land surface topography, current land surface topography, landfill expansion, remaining recharge areas outside of the landfill expansion, and any effect of the GWIs.

1.3.1.1 GROUNDWATER FLOW ALONG THE WESTERN BOUNDARY OF THE RWL/FAR

To the west of the FAR/RWL, groundwater flows from west to east before joining the overall flow pattern to the southeast. The interpretation of west to east groundwater flow at the western boundary of the RWL is based on specific past and current observations along the western boundary. Groundwater flow maps prepared for the 1993 RWL Permit to Install (AEP, 1993; Figure No. 21) and the 1999 reissued Potentiometric Map of the RWL (AEP Drawing No. 3J of Drawing 12-30729-5) both interpreted groundwater flow from west to east in the Morgantown from a recharge area near well 94131 toward the historical valley near Pond 1. The potentiometric contours in AEP Figure No. 21 and AEP Drawing No. 3J of Drawing 12-30729-5 also indicate a recharge area farther north, near wells 93102 and 94125, with components of groundwater flow to the southeast and east along the northwestern RWL boundary.

The 1960 USGS topographic map shows a topographic ridge existed east of Turkey Run Road, in the area that would become the western boundary of the RWL (USGS, 1960) The correlation of the potentiometric highs on the 1993 and 1999 figures referenced above and topographic highs suggests the area east of Turkey Run Road was a recharge area prior to the construction of the RWL. The USGS quadrangle notes the presence of historical mines in this area, which is interpreted to enhance recharge along ridges due to mine collapse and the presence of near-

vertical fractures. While there has been some modification of the land surface in recent years associated with the westward expansion of the RWL, the current land surface topography still consists of a ridge between the RWL and Turkey Run Road, as shown in Geologic Cross Section A-A' (Figure 1-5).

The RWL is located on the eastern side of this surface and groundwater ridge, so groundwater flow is interpreted to be from west to east at the western edge of the RWL, consistent with gravity-driven groundwater flow from areas of higher topographic relief to areas of lower topographic relief (Toth, 2009). This west to east flow pattern indicated in the 1993 interpretation is expected to be enhanced due to the reduction in recharge caused by removal of strip mine ponds that had acted as local recharge points within and near the RWL, installation of GWI drains which currently facilitate the movement of shallow groundwater to areas outside the RWL, and installation of the RWL liner which by design inhibits the downward migration of water (AEP, 1993).

Groundwater flow maps provided in the 2018 through 2025 Annual Groundwater Monitoring and Corrective Action Reports consistently show an easterly flow component in the Morgantown and Cow Run (ERM, 2019; ERM, 2020; ERM, 2021b; ERM, 2022; ERM, 2023; ERM, 2024; ERM, 2025; ERM, 2026). Justification for this interpretation based on potentiometric elevation data includes the following:

- The potentiometric surface at Morgantown well 2019-02 was higher than nearby Morgantown wells 2019-06 and 9535 in five out of six gauging events conducted between 2020 and 2022. The physical configuration of the wells and the measured piezometric elevations indicate an eastward groundwater flow direction in the Morgantown on the western side of the RWL.
- The potentiometric surface at Cow Run monitoring well 94126 was higher than nearby well 93100 in five out of six gauging events conducted between 2018 and 2019. The physical configuration of the wells and the measured piezometric elevations indicate an eastward groundwater flow direction in the Cow Run on the western side of the RWL.
- A comparison of potentiometric elevation data at Morgantown wells 94125 and 2019-06 also supports the eastward flow interpretation. Well 94125 was abandoned in 2019 due to RWL expansion and replaced in 2020 by 2019-06, which was located 450 feet to the west, outside the new boundary of waste. The average potentiometric elevation at 94125 from 2013 to 2019 was 589.47 feet above sea level and the average elevation at 2019-06 from 2020 to 2023 is 601.79 feet above sea level. The 12.32-foot difference in average elevation over several years generally supports the interpretation of groundwater flow from west to east.

1.3.1.2 GROUNDWATER FLOW ALONG THE EASTERN BOUNDARY OF THE RWL/FAR

The interpretation of groundwater divides east of the RWL eastern waste boundary and within remnant highwalls (*e.g.*, near wells 94122, MW-15, and MW-16) is based on specific past and

current observations along the eastern boundary, similar to those used to assess the groundwater divide along the western boundary of the RWL. The groundwater flow map prepared for the 1993 RWL PTI (AEP, 1993; Figure No. 21) interpreted radial groundwater flow in the Morgantown on the eastern side of the RWL from a recharge area near historical well 94122 and existing well 2001. This radial flow pattern is indicative of a recharge area and existed prior to the construction of the RWL.

The 1960 USGS topographic map shows a topographic ridge existed on the eastern boundary of the RWL at historical well 94122 and existing well 2000 (USGS, 1960). A ridge also ran northwest near the former FAR overflow spillway towards wells 2022-04 and 2022-05. Potentiometric highs were documented both on the eastern side of the future RWL near where the Stacker Pad currently exists, and north of where Pond 1 currently exists (AEP, 1993; Drawing No. 3J of Drawing 12-30729-5). The correlation of the potentiometric highs and topographic highs suggests that these were recharge areas prior to the construction of the RWL. The USGS quadrangle notes the presence of historical strip mines in this area, which may have enhanced recharge along ridges due to mine collapse and the presence of near-vertical fractures. While there has been some modification of the land surface in recent years associated with the expansion of the RWL, the current land surface topography still consists of a ridge along the eastern and northeastern sides of the RWL.

The groundwater divide prevents groundwater under the RWL from flowing towards the east in this area. West of the hydraulic divide located on the eastern side of the RWL, groundwater flow is interpreted to be from east to west before turning and flowing to the southeast. This east-to-west flow pattern was and is expected to be enhanced from 1993 interpretations due to the removal of strip mine ponds, installation of GWI drains, and placement of the composite liner that cut off recharge to the aquifer beneath the RWL (AEP, 1993).

1.3.1.3 REFINEMENT IN INTERPRETATION OF GROUNDWATER FLOW BENEATH THE RWL/FAR

In 2018, federal and state groundwater potentiometric elevation data sets for monitoring wells of the Morgantown and Cow Run were combined to increase spatial resolution and limit uncertainty in the interpretation of groundwater flow direction. This assessment identified: (i) the area of low hydraulic pressure along the axis of the landfill; (ii) groundwater flow from west to east on the western boundary; and (iii) a potentiometric high on the northeastern boundary of the RWL. The updated interpretation of regional groundwater flow in the Morgantown and Cow Run was from northwest to southeast towards the Ohio River. The overall interpretation of groundwater flow in the vicinity of the RWL/FAR is strongly influenced by site geology, pre-construction topography, and site preparation as hydraulic information is no longer able to be obtained from within the RWL due to the liner system or from within the FAR due to the cap.

Generally, the interpretations of groundwater flow under the RWL have been relatively consistent with overall flow towards the southeast. However, recent maps use higher-resolution datasets and differ in some ways from the flow directions and hydraulic features indicated in the 2012 PTI, such as the aforementioned ridge (Geosyntec, 2012). As shown in the 2018 through 2025 Annual

GWMCA Reports, existing wells located along the eastern and northeastern boundary include couplet wells 2002 and 2003, and 2022-04 and 2022-05, located in the Morgantown and Cow Run, respectively. At these locations, the Morgantown has a higher potentiometric surface than the Cow Run. These downward hydraulic gradients demonstrate the presence of recharge areas. Groundwater flow direction maps prepared for the 2018-2025 Annual GWMCA Reports consistently show groundwater mounds and radial flow in the Morgantown in this area.

1.4 2025 H2 GROUNDWATER SAMPLING EVENT

The data from the second semiannual groundwater sampling event from 2025 were compared to the upper and lower prediction limits for the Appendix III parameters, and SSIs for Appendix III analytes were identified in one well. Tables 1-1 and 1-2 summarize occurrences of SSIs from the H1 2025 sampling event.

TABLE 1-1 NO SSIS IN MORGANTOWN SANDSTONE AND ALLUVIUM DOWNGRADIENT MONITORING WELLS

Analyte	Monitoring Well								
	96157	94137	9802	2016-05	2000	2018-02	2018-04	93108	9806
Boron	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ
Calcium	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ
Chloride	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ
Fluoride	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ
pH, field	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ
Sulfate	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ
TDS	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ

Notes: ϕ = No SSI; SSI = statistically significant increase; TDS = Total Dissolved Solids
Results from groundwater samples collected in September/October 2025, except for monitoring well 94137. Due to pump replacement, monitoring well 94137 sample was collected in December 2025.

TABLE 1-2 SSIS IN COW RUN SANDSTONE DOWNGRADIENT MONITORING WELLS

Analyte	Monitoring Well				
	2016-06	2018-01[1]	2018-03	94136	9631
Boron	ϕ	NS	ϕ	ϕ	ϕ
Calcium	ϕ	NS	ϕ	ϕ	SSI
Chloride	ϕ	NS	ϕ	ϕ	SSI
Fluoride	ϕ	NS	ϕ	ϕ	ϕ
pH, field	ϕ	NS	ϕ	ϕ	ϕ
Sulfate	ϕ	NS	ϕ	ϕ	ϕ
TDS	ϕ	NS	ϕ	ϕ	SSI

Notes: ϕ = no SSI; NS= not sampled; SSI = statistically significant increase; TDS = Total Dissolved Solids
Results from groundwater samples collected in September and October 2025.
[1] Well 2018-01 was abandoned in 2022. A replacement monitoring well is currently being evaluated.

This ASD Report identifies the regional discharge of naturally occurring brine originating from bedrock as the source of calcium, chloride, and total dissolved solids (TDS) detected in groundwater collected from monitoring well 9631. Supporting information and additional discussion of the lines of evidence are presented in subsequent sections of this ASD Report.

2. DESCRIPTION OF ALTERNATE SOURCES

Regional brine is identified as the alternate source for the calcium, chloride, and TDS that are observed at the RWL/FAR. This a due to naturally occurring brine originating in/from bedrock (i.e., Cow Run Sandstone) as observed in shallow groundwater in and around Gavin.

A summary of regional brine and its influence on groundwater quality is provided below.

2.1 REGIONAL BRINE

Naturally occurring brine, which is known in the Ohio River Valley to have elevated levels of calcium, chloride, and other trace elements, exists in the subsurface (Stout et al. 1932; ORSANCO 1984; ODNR 1995). The discharge of brine is seen at a regional scale, with shallow wells near the Ohio River observing brine impacts because of the vertical head gradient driving overall flow upwards from bedrock to alluvium (USGS 1997). The Cow Run Sandstone is the shallowest sandstone of any importance in Ohio where brine of marine origin has been observed (Phalen 1919; Stout et al. 1932). Brine was discovered at the land surface approximately 10 miles southwest of the Plant in Gallipolis, Ohio and was utilized for the commercial production of salt beginning in 1807. This commercial production was enhanced by advancing a boring to a depth of 100 feet below ground surface, which resulted in a much stronger brine than found at the land surface (Stout et al. 1932). Naturally occurring brine was also identified at the land surface in Jackson, Ohio approximately 30 miles west of the Plant (ODNR 1995). The regional presence of shallow brine indicates the potential for naturally occurring brine to contribute Appendix III constituents in groundwater at the Plant. Evidence of brine impacts near the Plant includes conductivity measurements at several Cow Run Sandstone monitoring wells upgradient of the RWL and FAR (2016-10, 2019-07, 2019-09) that are consistently greater than 30,000 µS/cm and reach as high as 55,485 µS/cm at monitoring well 2019-07. For reference, the approximate specific conductivity of seawater is 50,000 µS/cm (USGS 2019). The same upgradient wells have historically contained elevated levels of constituents like calcium and chloride which range as high as 1,200 mg/L and 23,000 mg/L, respectively.

Site specific evidence on the presence of brine and the constituents present within brine is discussed in Section 4.

3. HYDRAULIC CONNECTIONS TO THE ALTERNATE SOURCES

Explanations of the hydraulic connections between potential alternate sources and downgradient wells at the RWL/FAR were provided in the first ASD Reports for the FAR and RWL (ERM 2018a, ERM 2018b) and are summarized below. Groundwater potentiometric contour maps for the Morgantown and Cow Run Sandstone are depicted in Figures 1-7 and 1-8, respectively.

3.1 HYDRAULIC CONNECTION TO REGIONAL BRINE

Regional groundwater within the fractured sedimentary bedrock in the Ohio River Valley generally flows from areas of higher topographic elevation towards areas of lower elevation, ultimately discharging to the Ohio River (ORSANCO 1984). Precipitation infiltrates the land surface to recharge the underlying aquifers below, and the flow of groundwater within these aquifers is primarily driven by the gravitational force on groundwater (differences in hydraulic head) within the bedrock. The Cow Run Sandstone extends west of the RWL/FAR where naturally occurring brine (with elevated calcium, chloride, and TDS) is known to impact Cow Run groundwater (Phalen 1919, Stout et. al. 1932). As depicted in Figures 1-7 and 1-8, the Morgantown and Cow Run under the southeastern portion of the FAR and under the RWL contain a region of lower hydraulic pressure in comparison to the surrounding areas. The forested and pastured areas surrounding the FAR and RWL are more permeable and exhibit greater infiltration than the FAR and RWL, which have either an engineered cap (FAR) or liner (RWL) designed to reduce or eliminate recharge to the underlying aquifers. Thus, the pathway for regional groundwater flows through the fractured bedrock from regions surrounding the RWL/FAR to regions of lower pressure south and east of the RWL and eventually toward the Ohio River. As described in Section 2, Cow Run monitoring wells 2016-10, 2019-07, and 2019-09, which are hydraulically upgradient of the RWL and FAR exhibit elevated specific conductivity measurements, consistent with regional observations of brine. Based on these considerations, the fractured rock of the sandstones is hydraulically connected to brine, which is the alternate source of calcium, chloride, and TDS.

3.1.1 GROUNDWATER FLOW RATES

Packer tests were completed in 2012 to assess hydraulic conductivity for locations in both the Morgantown and Cow Run Sandstone around the northern portion of the RWL (AEP and Geosyntec 2012). The range of hydraulic conductivity values from the packer tests in the Morgantown and Cow Run are provided in Table 3-1.

TABLE 3-1: ESTIMATED HYDRAULIC CONDUCTIVITY VALUES FOR MORGANTOWN AND COW RUN SANDSTONE

	Average K	Low K	High K
Morgantown (Geosyntec 2012)	7.18 x 10^{-5} cm/sec	2.2 x 10^{-8} cm/sec	4.6 x 10^{-4} cm/sec
Cow Run (Geosyntec 2012)	2.92 x 10^{-5} cm/sec	5.0 x 10^{-8} cm/sec	5.9 x 10^{-4} cm/sec

Notes: cm/sec = centimeters per second; K = hydraulic conductivity
Geosyntec 2012 values derived from packer tests (10-foot interval) completed in boreholes across mainly the northern part of the RWL.

The velocity of groundwater flowing through the Morgantown Sandstone was estimated in 2025 based on the measured horizontal hydraulic gradient (0.011 feet/feet), estimated hydraulic conductivity of 7.18 x 10^{-5} cm/sec (AEP and Geosyntec 2012), and an estimated effective porosity value of 0.01 for fractured bedrock. The estimated groundwater velocity calculated is approximately 78 to 79 feet/year (ERM 2026).

The velocity of groundwater flowing through the Cow Run Sandstone was estimated for 2025 based on the measured horizontal hydraulic gradient (0.010 feet/feet), the estimated hydraulic conductivity of 2.92 x 10^{-5} cm/sec (AEP and Geosyntec 2012), and an effective porosity value of 0.01 for fractured bedrock. The estimated groundwater velocity calculated is approximately 31 to 32 feet/year (ERM 2026).

Fractures observed at the site vary in frequency, distribution, and orientation as seen by the variability in monitoring well recharge rates and the measured hydraulic conductivity (Table 3-1). Groundwater flow is expected to occur primarily through the fractures, as the porosity of the fractures is expected to be much greater than the porosity of the rock matrix. Mine-roof collapse in underground mines commonly causes the overlying rocks to settle and fracture (AEP 1993). This settling may cause subsidence and the vertical propagation of extensive fractures to the land surface. Vertical seepage can also occur to lower aquifers along these steeply inclined stress relief fractures (AEP 1993). As such, areas of the Site that were previously mined, including the ridges surrounding the RWL and FAR, are expected to act as recharge areas.

4. CONSTITUENTS ARE PRESENT AT THE ALTERNATE SOURCES OR ALONG THE FLOW PATHWAYS

Regional brine is identified as the source of calcium, chloride, and TDS in RWL/FAR downgradient groundwater. Groundwater quality at the RWL/FAR is also influenced by external sources, as described in Sections 2, 3, and 7.

4.1 REGIONAL BRINE

Regional brine, as discussed above, is present in the area of the Plant and locally in bedrock under the RWL/FAR. Federal monitoring wells 2019-07 and 2019-09, which were installed upgradient of the RWL in Cow Run Sandstone, have chemical signatures indicating brine.

In addition to the brine signatures observed in upgradient RWL wells, brine signatures have also been detected in Cow Run wells located at the BAP. At the BAP, concentrations of calcium, chloride, fluoride, and TDS are generally higher, and in some cases one to two orders of magnitude higher in bedrock than in the overlying alluvial aquifer, consistent with a regional brine signature. The H2 2025 results for calcium, chloride, and TDS in upgradient Morgantown groundwater (2019-06), upgradient Cow Run groundwater (2019-07 and 2019-09), and brine-impacted wells located at the BAP (BAC-09, BAC-11, BAC-13, BAC-19) are presented in Table 4-1.

TABLE 4-1 CONCENTRATIONS IN ON-SITE BRINE IMPACTED BEDROCK GROUNDWATER

Analyte	Units	Upgradient Morgantown Groundwater at the RWL	Upgradient Cow Run Groundwater at the RWL	Bedrock Groundwater at the BAP
Calcium	mg/L	84	970	110-2,900
Chloride	mg/L	4,700	20,000	1,000-29,000
TDS	mg/L	7,700	27,000-32,000	1,700-36,000

Notes: BAP = Bottom Ash Pond; mg/L = milligrams per liter; RWL = Residual Waste Landfill; TDS = total dissolved solids
Upgradient Morgantown Groundwater at the RWL includes data from the monitoring well 2019-06 sample collected in September 2025.
Upgradient Cow Run Groundwater at the RWL includes data from monitoring wells 2019-07 and 2019-09 samples collected in September 2025 (these wells had identical analytical results for calcium and chloride).
Bedrock Groundwater at the BAP includes data from monitoring wells BAC-09, BAC-11, BAC-13, BAC-19 samples collected in September/October 2025.

Given the concentrations observed in Cow Run groundwater at the RWL and BAP compared to those in Morgantown groundwater, stronger brine impacts are present in the underlying Cow Run aquifer. In H2 2025, concentrations of calcium, chloride, and total dissolved solids were an order of magnitude higher in Cow Run monitoring well 2019-07 than in the collocated Morgantown

monitoring well 2019-06. Were a release from the RWL the source of these constituents, concentrations would likely be higher in the overlying Morgantown Sandstone.

Based on a review of permit applications for historical oil and gas wells installed within the Gavin property by prior owners, the Ohio Department of Natural Resources (ODNR) routinely required applicants to identify the company responsible for collecting, transporting, and disposing of salt water to be produced by the proposed well. Oil and gas wells in the vicinity of the Gavin Plant were typically drilled to a depth of approximately 1,800 feet below ground surface and recovered brine was temporarily stored in pits at the wellsite prior to offsite disposal. In addition, the permits demonstrate that the boreholes were typically not sealed below 250 feet below ground surface if oil and gas were not found, which would leave an unsealed borehole that could allow the upward migration of brine to shallower strata, including the Cow Run. These ODNR records demonstrate the naturally occurring presence of brine at the Gavin property in geologic strata located beneath the Cow Run Sandstone and the potential for upward migration of brine through unsealed boreholes (ODNR 2024).

The elevated concentrations of calcium, chloride, and TDS in the upgradient bedrock groundwater indicate that these constituents are present in brine at the regional level and along flow paths to Cow Run wells at the Gavin Plant.

5. LINKAGES OF CONSTITUENT CONCENTRATIONS AND DISTRIBUTIONS BETWEEN ALTERNATE SOURCES AND DOWNGRADIENT WELLS

5.1 REGIONAL BRINE

As discussed in Sections 2 and 4, the concentrations of calcium, chloride, and TDS are elevated in regional brine. Table 4-1 demonstrates that the concentration of calcium, chloride, and TDS are higher in Cow Run groundwater upgradient of the RWL than in Morgantown groundwater in the area. This is indicative of a source emanating from a deeper stratum (e.g. where brine is found). As demonstrated in Section 4, oil & gas well permits indicate that brine is present in sandstone strata under the RWL/FAR.

Regionally, concentrations of calcium exceeding 10,000 mg/L, chloride exceeding 50,000 mg/L, and TDS exceeding 100,000 mg/L have been observed in Ohio brines (Stout et. al. 1932). Locally, the concentrations of calcium, chloride, and TDS observed in groundwater from monitoring well 9631 are consistent with upgradient wells impacted by regional brine, as summarized in Table 5-1. As described in Section 3, the pathway for regional groundwater follows hydraulic pressure gradients through the fractured Cow Run Sandstone from regions located north, west and southwest of the RWL/FAR, to the southern and eastern regions toward the Ohio River. As described in Section 3.1.1, hydraulic conductivity of the underlying bedrock varies at the site, resulting in localized brine impacts. Thus, there is a well-documented regional source of brine, brine impacts are detected at upgradient wells at the Site, hydraulic pathways exist from deeper to shallower strata and the similarity of the calcium, chloride, and TDS concentrations between monitoring well 9631 and upgradient wells 2019-07 and 2019-09 demonstrate the linkage of constituent concentrations between the alternate source (brine) and downgradient wells.

TABLE 5-1: COMPARISON OF BRINE IMPACTED BEDROCK TO DOWNGRADIENT WELL 9631

Analyte	Units	Maximum Brine-Impacted Groundwater in Upgradient Bedrock RWL/FAR (As measured at 2019-07 and 2019-09)	Monitoring Well 9631
Calcium	mg/L	970	1,500
Chloride	mg/L	20,000	26,000
TDS	mg/L	32,000	39,000

Notes: RWL/FAR = Residual Waste Landfill/Fly Ash Reservoir; mg/L = milligrams per liter
Results from groundwater samples collected in September 2025.

6. DATA DOES NOT INDICATE THAT THE RWL/FAR IS THE SOURCE

6.1 GEOCHEMICAL SIGNATURES

The geochemical fingerprints of landfill leachate from the RWL and downgradient well 9631 were evaluated using the concentrations of Appendix III parameters. Landfill leachate is characterized by elevated concentrations of boron, chloride, and sulfate – concentrations of these parameters in groundwater from well 9631 and leachate from Ponds 1 and 2 are shown in Figure 6-1. These parameters were selected due to their elevated concentrations in site landfill leachate, their elevated solubility in water, limited potential for sorption, and limited potential for transformations due to changes in redox conditions.

The samples presented in these time series plots were collected from 2010 through 2025. The primary observations based on these plots are the following.

- Sulfate is consistently one-to-two orders of magnitude higher in landfill leachate than in groundwater from monitoring well 9631. The increasing concentrations of calcium, chloride, and TDS in groundwater from well 9631 were not accompanied by an increase in sulfate concentrations. Given the elevated concentrations of sulfate in landfill leachate, a release from the landfill is not likely to occur without a concurrent increase in the concentration of sulfate in downgradient wells.
- In contrast, chloride has been consistently higher at monitoring well 9631 than in landfill leachate. The brine signature was first observed at monitoring well 9631 in February 2024. Since this initial observation, samples have been collected thirteen times between February 2024 and September 2025. Chloride concentrations increased sharply compared to data collected earlier but have remained stable since the increase in chloride was initially observed. A release of landfill leachate and subsequent mixing with groundwater would result in a decrease in the concentration of chloride in groundwater from monitoring well 9631, which did not occur.
- Boron is consistently an order of magnitude higher in landfill leachate than in groundwater collected from monitoring well 9631. The increasing concentrations of calcium, chloride, and TDS in groundwater from well 9631 were not accompanied by an increase in boron concentrations. Boron is expected to act as a conservative tracer due to its high solubility and mobility in water. Therefore, a release of landfill leachate would result in an increase in boron concentrations, which was not observed from 2010 through fall 2025.

A release from the RWL/FAR would result in increasing concentrations of boron and sulfate and decreasing concentrations of chloride at monitoring well 9631. In contrast, chloride has increased since 2021 while boron and sulfate have remained stable. Further, a release from the RWL/FAR would need to migrate from the surface through the Morgantown Sandstone before concentrations would increase in the Cow Run Sandstone. SSIs were not detected in any downgradient wells screened in the Morgantown Sandstone.

Based on the data summarized above and the chemical signatures of the groundwater at issue, the RWL/FAR is not deemed to be the source of the SSIs.

7. ALTERNATE SOURCE DATA ARE HISTORICALLY CONSISTENT WITH HYDROGEOLOGIC CONDITIONS AND FINDINGS OF THE MONITORING PROGRAM

7.1 REGIONAL BRINE

The existence of Regional Brine in the area surrounding the plant is supported by historical studies and data. Regional groundwater flow regimes through fractured bedrock upgradient of the RWL/FAR were established after the last deglaciation, which occurred approximately 14,000 years ago (Hansen 2017). Enhancement of transmissivity in the Ohio River Valley from stress-relief fracturing in bedrock provides conditions for bedrock to be interconnected to coarse glacial outwash alluvial deposits (USGS 1981; USGS 1997). Regional groundwater within the fractured sedimentary bedrock in the Ohio River Valley generally flows from areas of higher topographic elevation towards areas of lower elevation, ultimately discharging to the Ohio River (ORSANCO 1984). Assuming a conservatively high effective porosity of 1 percent, estimated groundwater velocity values for the Morgantown Sandstone and Cow Run Sandstone units are approximately 77 to 79 feet per year and 31 to 32 feet per year, respectively. These flow rates would allow ample time for groundwater to migrate from upgradient regional background sources to Plant property. The data supporting these conclusions are historically consistent with hydrogeologic conditions and findings of the RWL/FAR monitoring program.

The discharge of brine is seen at a regional scale along the Ohio River with shallow wells near the Ohio River observing saltwater impacts; whereas, further from the Ohio River shallow wells report little to no brine impacts (USGS 1997). TDS concentrations observed in bedrock wells around the RWL/FAR are consistent with observations seen at brine-freshwater mixing zones at other brine-impacted sites (Yager et al. 2017). The regional and site-specific data are in strong agreement, and demonstrate that regional brines are discharging under the RWL/FAR and mixing with Cow Run groundwater underneath the RWL/FAR.

8. CONCLUSIONS

The SSIs identified in this ASD Report are based on results from downgradient RWL/FAR monitoring well samples collected from September through December 2025. Review of data for quality assurance and statistical comparison was completed on January 13, 2026. In response to the SSIs, this ASD Report was prepared and certified by January 31, 2026 in accordance with 40 CFR § 257.94(e)(2).

SSIs in the downgradient RWL/FAR monitoring well 9631 have been determined to result from alternate sources based on analysis of the gathered data: discharge of regional brine present in bedrock. Table 8-1 summarizes the six lines of evidence for each of the SSIs.

In conclusion, the RWL/FAR is not the source of the SSIs associated with the second semiannual sampling event groundwater results for 2025. Thus, Gavin will continue detection monitoring at the RWL/FAR in accordance with 40 CFR § 257.94(e)(2).

TABLE 8-1: RWL/FAR ASD SUMMARY

Analyte	SSI Location	Six Lines of Evidence from USEPA Guidance					
		Alternate Source	Hydraulic Connection	Constituent Present at Source or along Flow Path	Constituent Distribution More Strongly Linked to Alternate Source	Constituent Could Not Have Resulted from the RWL/FAR	Data Are Historically Consistent with Hydrogeologic Conditions
Calcium	9631	Regional Brine	X	X	X	X	X
Chloride	9631	Regional Brine	X	X	X	X	X
TDS	9631	Regional Brine	X	X	X	X	X

Notes: RWL/FAR = Residual Waste Landfill/Fly Ash Reservoir; SSI = statistically significant increase; USEPA = United States Environmental Protection Agency.

9. PROFESSIONAL ENGINEER CERTIFICATION

I hereby certify that I, or an agent under my review, have prepared this Alternate Source Demonstration Report for the Residual Waste Landfill/Fly Ash Reservoir and it meets the requirements of 40 CFR § 257.94(e)(2). To the best of my knowledge, the information contained in this Report is true, complete, and accurate.

James A. Hemme, P.E.
State of Ohio License No.: 72851

Date: 1/31/26

10. REFERENCES

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FIGURES

Figure 1-1: Gavin Plant Location
Gavin Generating Station
Cheshire, Ohio

ERM

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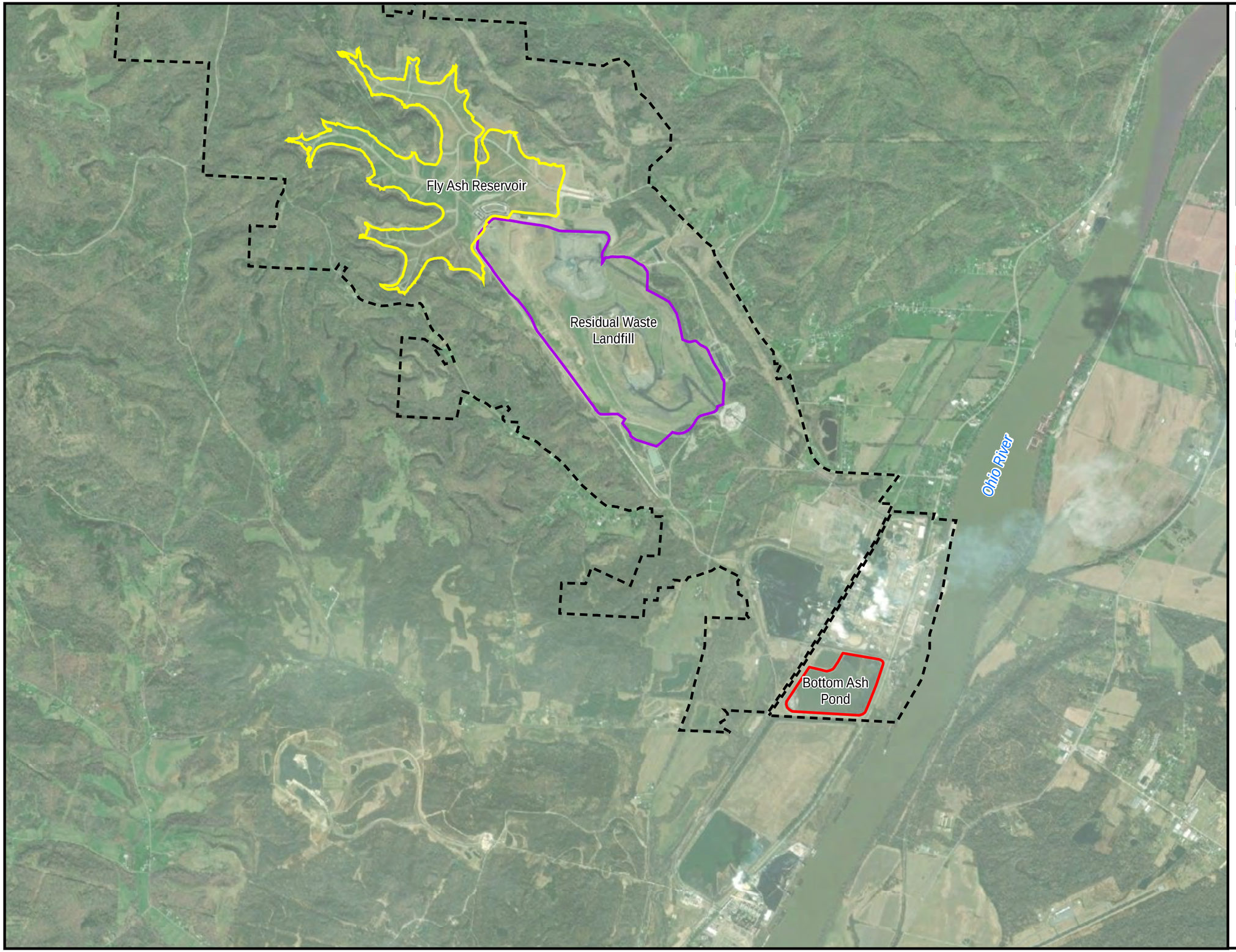

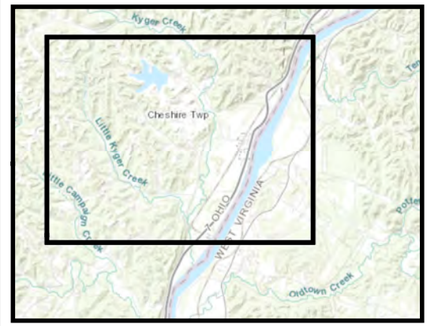

Legend

- Bottom Ash Pond
- Fly Ash Reservoir
- Residual Waste Landfill
- Property Boundary

NOTES:
1. Aerial Imagery: ESRI World Imagery
   Reproduced under license in ArcGIS 10.8

N

0 500 1,000 2,000 3,000 4,000
Feet

Figure 1-2: RWL and FAR Locations
Gavin Generating Station
Cheshire, Ohio

ERM

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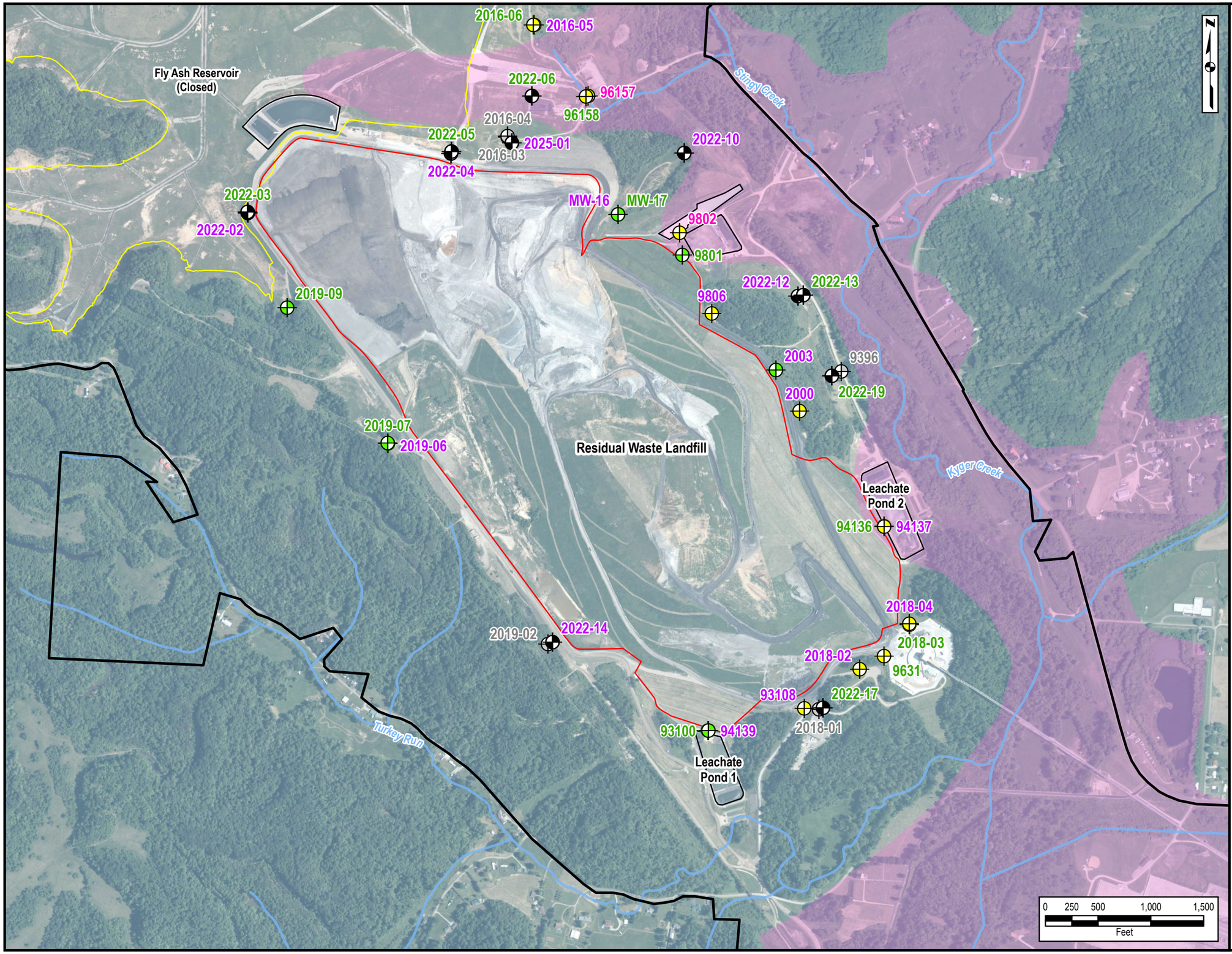


Legend

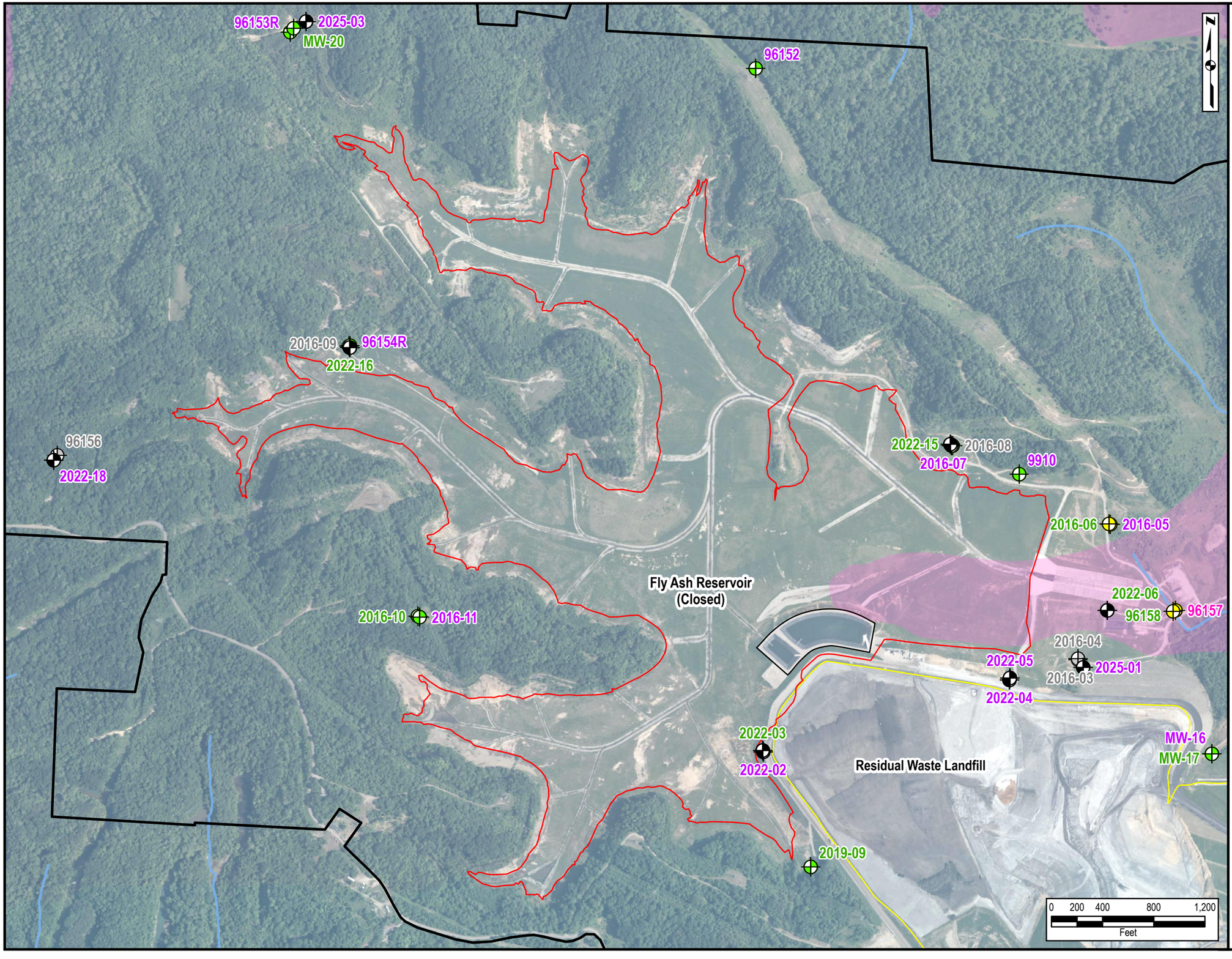
- Federal Upgradient Monitoring Well
- Federal Downgradient Monitoring Well
- Supplemental Monitoring Well (Under Evaluation for Inclusion in Network)
- Abandoned Well
- Stream/Creek
- Pond Area
- Residual Waste Landfill
- Fly Ash Reservoir
- Gavin Property Boundary
- Interpreted area where the Morgantown Sandstone has been eroded and is not present (based on borehole logs and topographic analysis)
- 94138 Alluvium Monitoring Well
- 93108 Morgantown Monitoring Well
- 93105 Cow Run Monitoring Well
- 96156 Abandoned Well

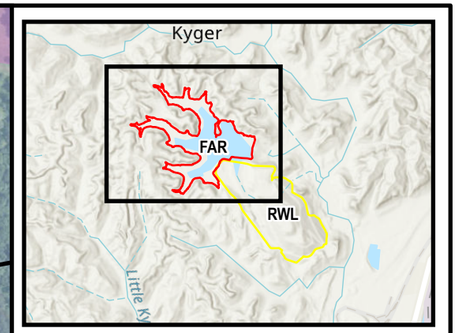
NOTES:

1. Aerial Imagery: USDA National Agriculture Imagery Program (NAIP), May 2023

Figure 1-3: Federal Monitoring Well Locations
Residual Waste Landfill Area
Gavin Power, LLC
Cheshire, Ohio

ERM





Legend

- Federal Upgradient Monitoring Well
- Federal Downgradient Monitoring Well
- Supplemental Monitoring Well (Under Evaluation for Inclusion in Network)
- Abandoned Well
- Stream/Creek
- Pond Area
- Fly Ash Reservoir
- Residual Waste Landfill
- Gavin Property Boundary
- Interpreted area where the Morgantown Sandstone has been eroded and is not present (based on borehole logs and topographic analysis)
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- 93108 Morgantown Monitoring Well
- 93105 Cow Run Monitoring Well
- 96156 Abandoned Well

NOTES:

1. Aerial Imagery: USDA National Agriculture Imagery Program (NAIP), May 2023

Figure 1-4: Federal Monitoring Well Locations
Fly Ash Reservoir Area
Gavin Power, LLC
Cheshire, Ohio

ERM

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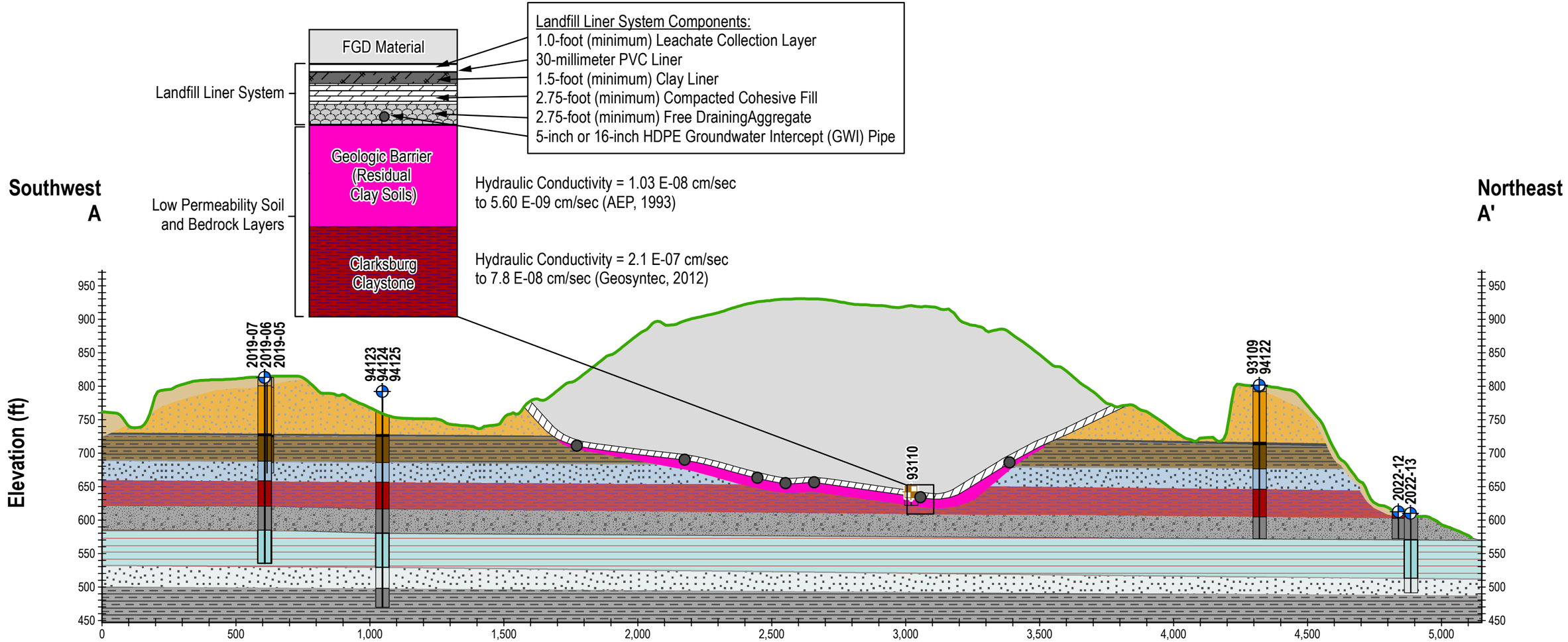

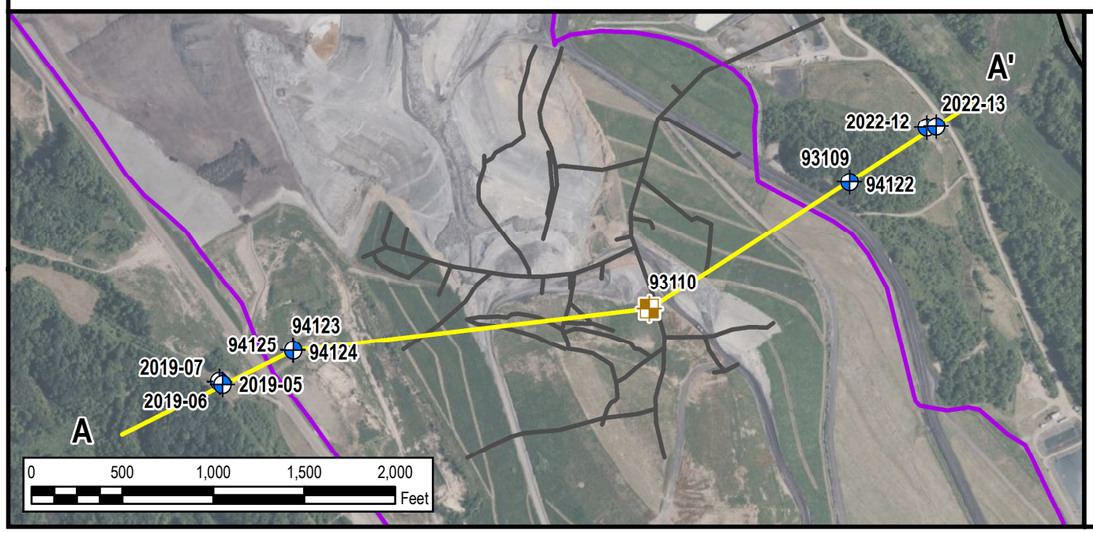

Legend

- Monitoring Well
- Soil Boring
- Groundwater Intercept (GWI) Infrastructure
- Surface Profile - 2022
- Boring Trace
- Cross-section Transect
- Approximate GWI Piping
- Proposed Limit of Waste
- Site Boundary
- Landfill Liner System

Generalized Lithology

- Overburden/Fill
- FGD Material
- Geologic Barrier (Residual Clay Soils)
- Pomeroy Sandstone
- Pomeroy Coal
- Undifferentiated Pittsburgh
- Connellsville Sandstone
- Clarksburg Claystone
- Morgantown Sandstone
- Round Knob Shale
- Cow Run Sandstone
- Anderson/Bloomfield/Buffalo Clayshale

Figure 1-5: Geologic Cross Section A-A'
Gavin Power, LLC
Cheshire, Ohio

NOTE:

1. To more clearly illustrate geologic features, the Elevation (Y axis) scale is exaggerated 2.5x compared with the Distance Along Transect (X axis) scale, though both axes use feet as theunit of measurement.
2. Boring surface elevations, ground surface elevations and esitmated bedrock surface are projected along transect line.
3. The geology is generalized based on the lithology descriptions.
4. GWI piping shown to scale on inset figure depicting Landfill Liner System Components. GWI piping diameter exaggerated on Section to depict locations of piping infrastructure intersecting Section line.
5. Aerial Imagery from ESRI World Imagery Reproduced under license in ArcGIS 10.8.

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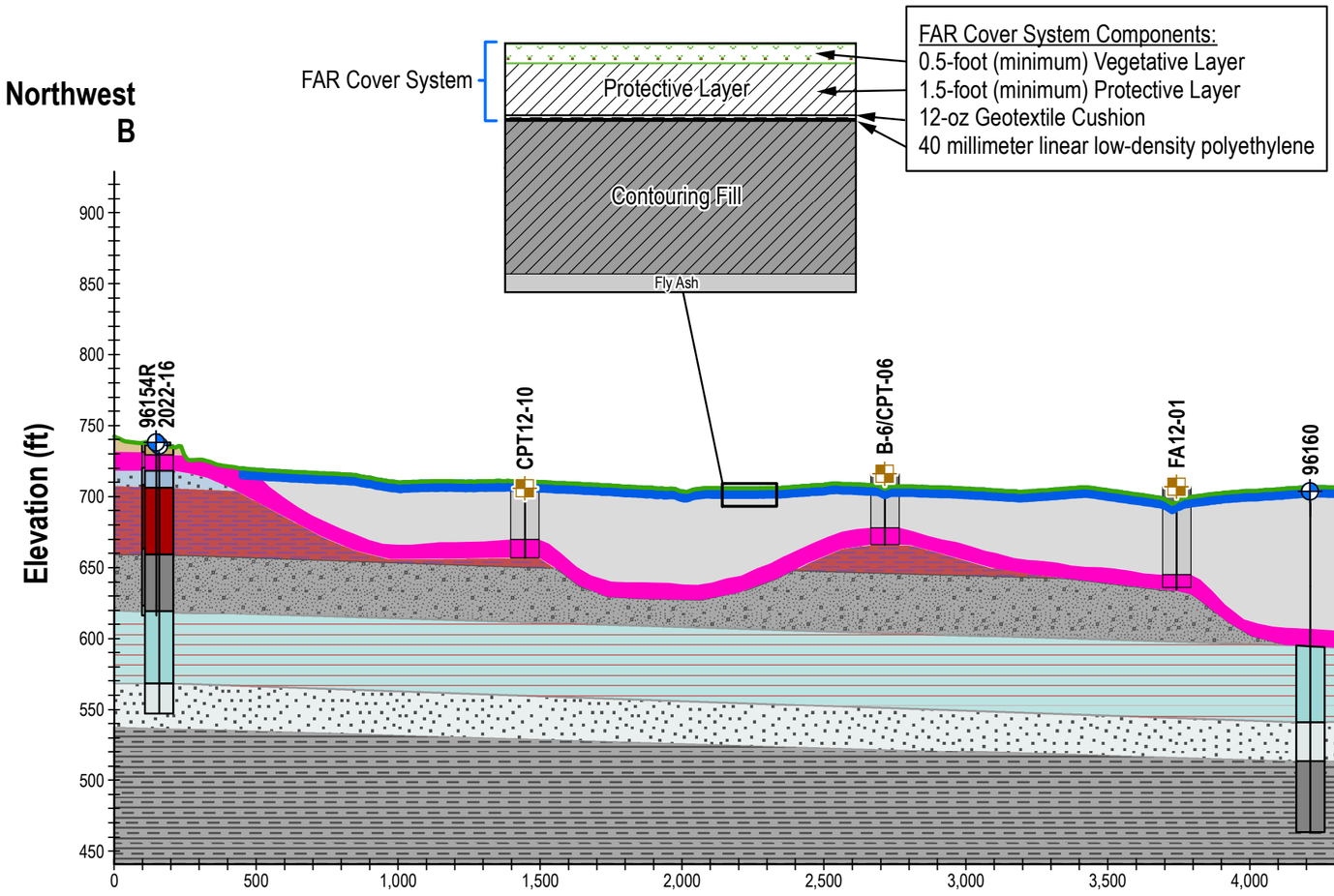

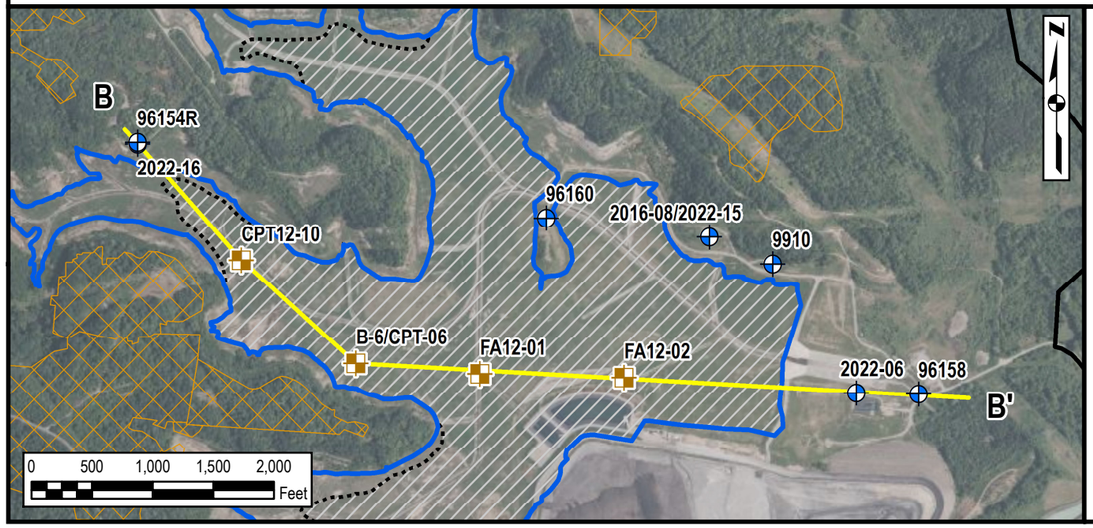

Legend

- Monitoring Well
- Soil Boring/CPT Location
- Surface Profile - 2022
- FAR Cover System
- Boring Trace
- Cross-section Transect
- Extent of Fly Ash
- Extent of FAR Cover System
- Historic Mining Area
- Site Boundary

Generalized Lithology

- Overburden
- Fly Ash
- Clay Core
- Fill
- Residual Clays
- Connellsville Sandstone
- Clarksburg Claystone
- Morgantown Sandstone
- Round Knob Shale
- Cow Run Sandstone
- Anderson/Bloomfield/Buffalo Clayshale

Figure 1-6: Geologic Cross Section B-B'
Gavin Power, LLC
Cheshire, Ohio

NOTE:

1. To more clearly illustrate geologic features, the Elevation (Y axis) scale is exaggerated 5x compared with the Distance Along Transect (X axis) scale, though both axes use feet as the unit of measurement.
2. Boring surface elevations, ground surface elevations and esitmated bedrock surface are projected along transect line.
3. The geology is generalized based on the lithology descriptions.
4. Aerial Imagery from ESRI World Imagery Reproduced under license in ArcGIS 10.8.

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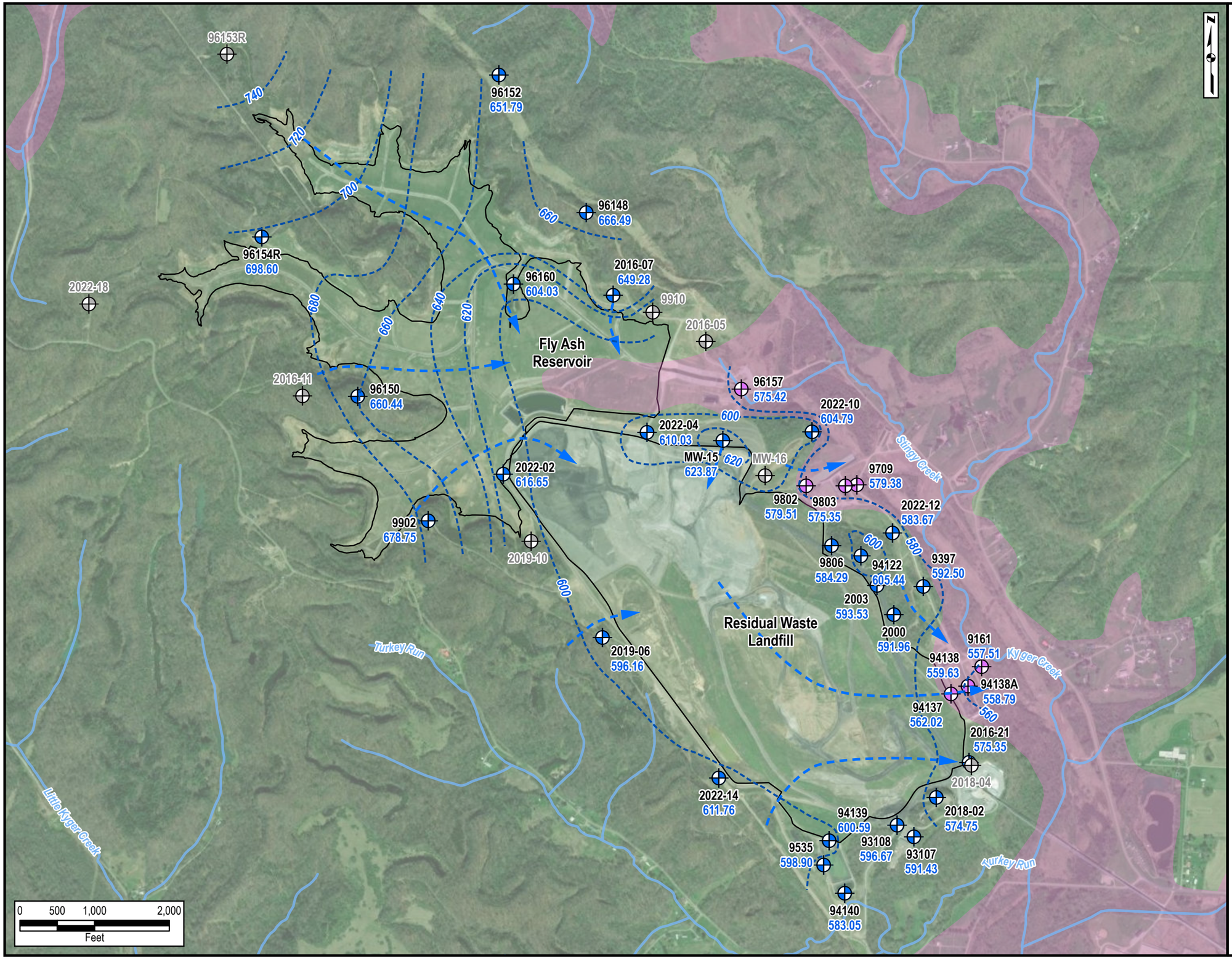

Legend

- Morgantown Sandstone Monitoring Well
- Morgantown Sandstone Monitoring Well - Low Recharge, Dry, Data Anomaly, or Not Gauged
- Alluvium Monitoring Well
- 605.82 Groundwater Elevation (ft)
- H2 2025 Interpreted Groundwater Potentiometric Contour
- H2 2025 Interpreted Generalized Groundwater Flow Direction
- Stream/Creek
- Coal Combustion Residual Unit
- Interpreted area where the Morgantown Sandstone has been eroded and is not present (based on borehole logs and topographic analysis)

NOTES:

- Interpreted contours based on groundwater gauging conducted on 9/8/2025 - 9/9/2025.
- Some groundwater elevation contours were interpreted using historical groundwater trends in monitoring wells that were not gauged in September 2025.
- Where the Morgantown SS is absent, the contours represent the potentiometric surface in the alluvial aquifer because these aquifers are hydraulically connected.
- H2 refers to the second half of 2025.

Figure 1-7: Morgantown Sandstone Groundwater Flow Directions
H2 2025
Gavin Power, LLC
Cheshire, Ohio

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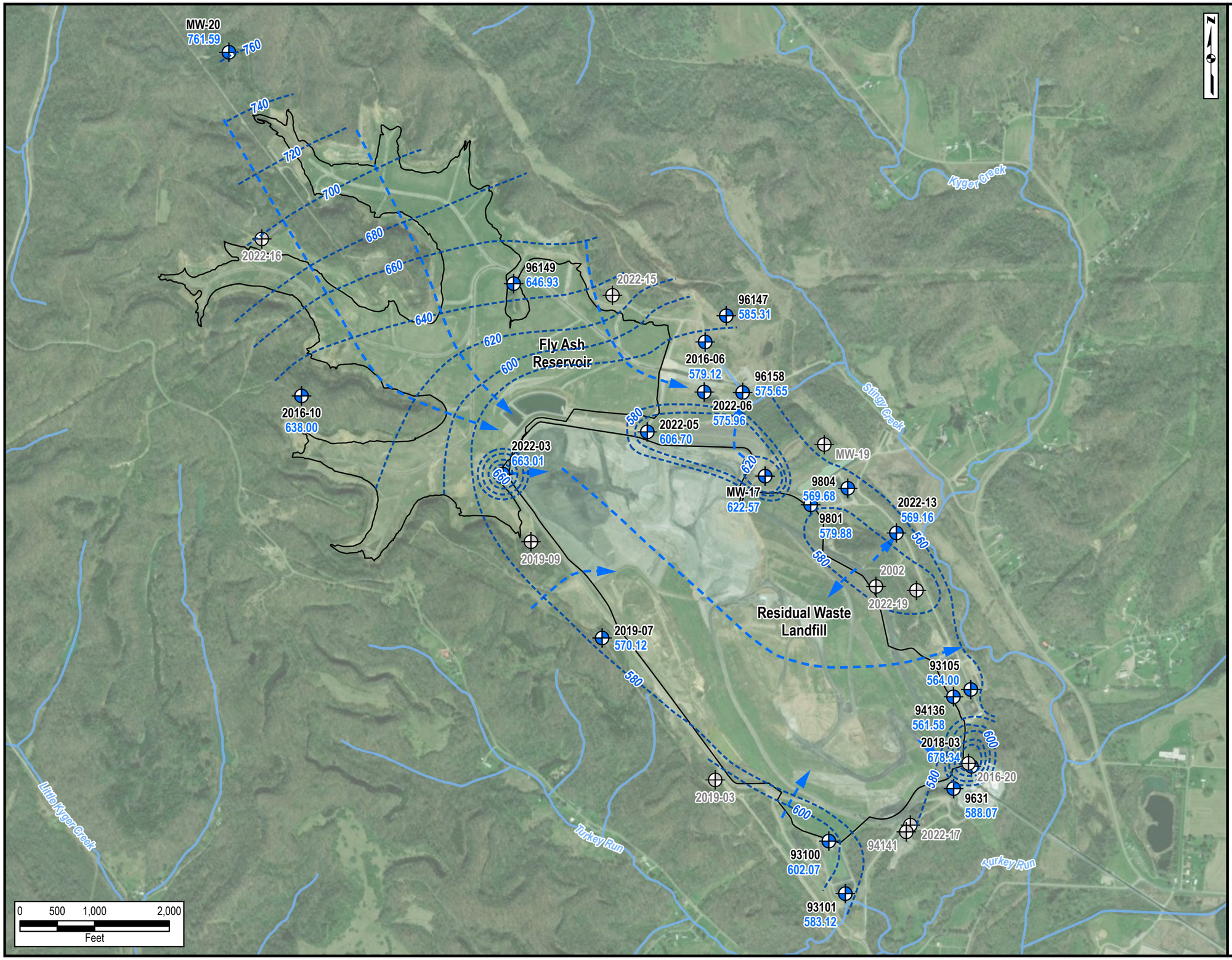

Legend

- Cow Run Sandstone Monitoring Well
- Cow Run Sandstone Well - Low Recharge, Dry, or Data Anomaly
- 605.82 Groundwater Elevation (ft)
- H2 2025 Interpreted Groundwater Potentiometric Contour
- H2 2025 Interpreted Generalized Groundwater Flow Direction
- Stream/Creek
- Coal Combustion Residual Unit

NOTES:

- Cow Run Sandstone is present through entire site.
- Interpreted contours based on groundwater gauging conducted on 9/8/2025 - 9/9/2025.
- Some groundwater elevation contours were interpreted using historical groundwater elevation trends in monitoring wells that were not gauged in September 2025.
- H2 refers to the second half of 2025.

Figure 1-8: Cow Run Sandstone Groundwater Flow Directions H2 2025
Gavin Power, LLC
Cheshire, Ohio

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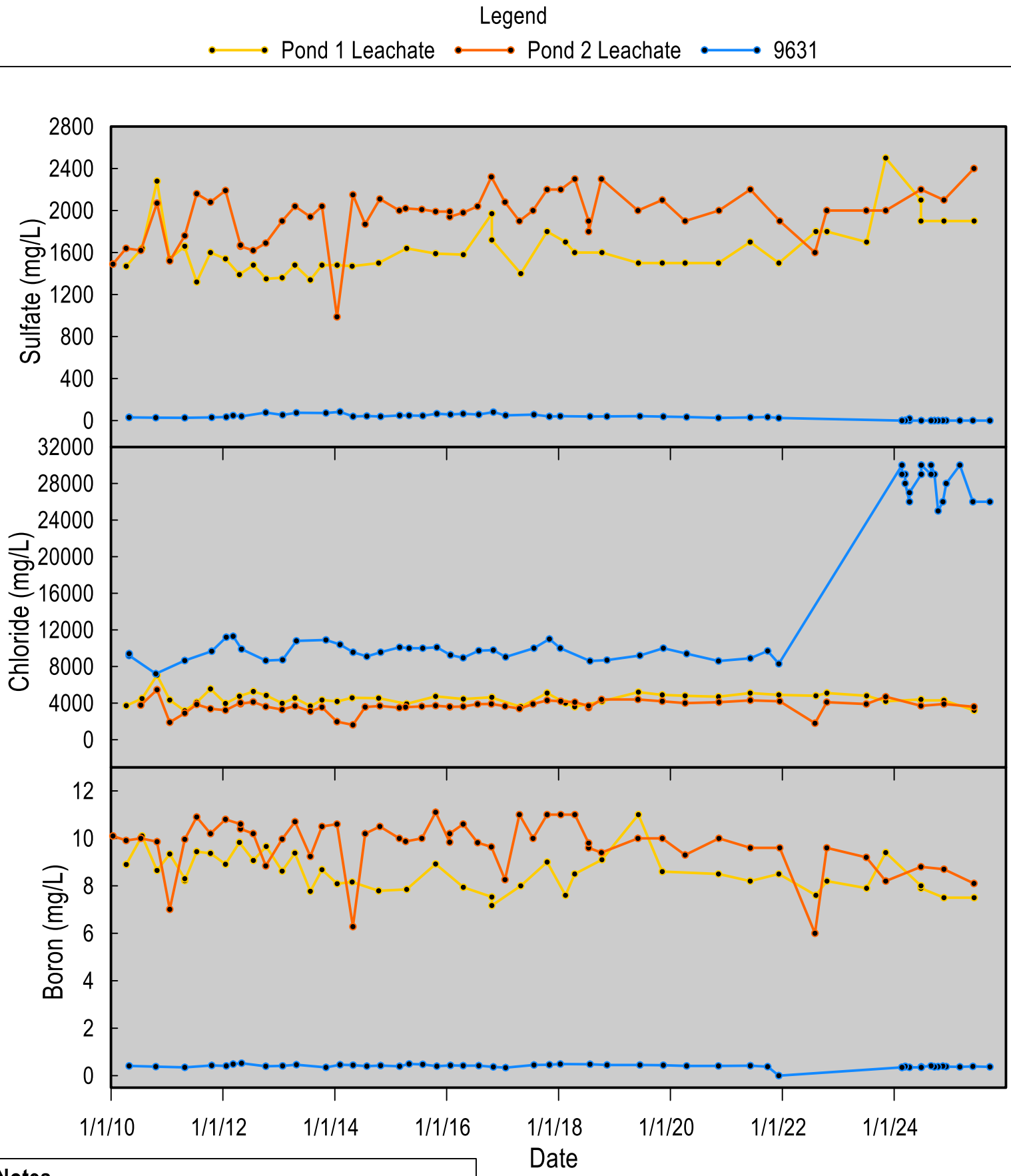

Notes

1. Date range January 2010 to September 2025.
2. Figure includes data collected under both Federal CCR Program and Ohio State Sampling Program.
3. Non-detects are plotted as zero.
4. Anomalous boron data for Pond 1 Leachate on 4/16/2020 omitted.

Figure 6-1. Boron, Chloride, and Sulfate in Brine Impacted Wells and Landfill Leachate
Gavin Generating Station
Cheshire, Ohio

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APPENDIX E ANALYTICAL DATA SUMMARY

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
	Date	2016-08-24	2016-10-06	2016-12-01	2017-02-02	2017-03-23	2017-05-01	2017-06-12	2017-07-17	2018-03-15	2018-09-13	2019-03-12	2019-09-24	2020-03-24	2020-09-22
	Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L			417	424					380	370	380	380	390	380
Aluminum	mg/L					7.8 J	0.18	1.4 B	0.32						
Antimony	mg/L	2E-05 J	1E-05 J	3E-05	0.0001	0.002 U	0.002 U	0.002 U	0.002 U						
Arsenic	mg/L	0.0018	0.00177	0.00153	0.00192	0.0042 J	0.0017 J	0.0024 J	0.0017 J						
Barium	mg/L	0.0244	0.0233	0.019	0.0245	0.078 B	0.022	0.036	0.024						
Beryllium	mg/L	2E-05 U	5E-06 J	5E-06	2E-05 U	0.00042 J	0.001 U	0.001 U	0.001 U						
Bicarbonate Alkalinity as CaCO3	mg/L									350	330		340	350	350
Bicarbonate Alkalinity as HCO3	mg/L											350			
Boron	mg/L	0.289	0.278	0.296	0.283	0.33	0.33	0.34	0.35 JB	0.32		0.34	0.31	0.29	0.32
Bromide	mg/L			0.412	0.334	0.41 J	5 U	2.5 U	2.5 U						
Cadmium	mg/L	2E-05 U	5E-06 J	1E-05	5E-05	0.001 U	0.001 U	0.001 U	0.001 U						
Calcium	mg/L	2.7	2.78	2.64	2.57	3.9 B	2.5	3.2	2.6	2.6	2.8	2.6	2.6	2.5	2.7
Carbonate Alkalinity as CaCO3	mg/L									34	34	34	38	41	29
Chloride	mg/L	83.9	92	96.9	96.3	96	60	79	62	86	96	93	100	110	87
Chromium	mg/L	0.0018	0.0033	0.0007	0.00263	0.06	0.0019 J	0.0081	0.0019 J						
Cobalt	mg/L	0.00011	0.000202	4.6E-05	0.000151	0.0052	0.00026 J	0.0011	0.00042 J						
Conductivity, Field	uS/cm	2068	2149	2094	2158					2079				2014	1990
Copper	mg/L					0.01 B	0.002 U	0.0048 B	0.002 U						
Dissolved Oxygen, Field	mg/L	0.88	3.16	1.59	1.86					0.2					
Dissolved Solids, Total	mg/L	1220	1300	1290	1290	1300 J	1200 J	1300	1300 J	1300		1300	1300	1300	1200
Fluoride	mg/L	1.86	2	2.26	2.13	2.6	2.2	2.4	2.2	2.2	2.3	2.2	2.5	2.4	2.1
Iron	mg/L					8.3 JB	0.19	1.5	0.39						
Lead	mg/L	3.9E-05	9.6E-05	4.9E-05	0.000237	0.0052 J	0.00056 J	0.0011	0.00058 J						
Lithium	mg/L	0.02	0.023	0.017	0.014	0.021	0.016	0.018	0.016						
Magnesium	mg/L			0.724	0.723	2.4 B	0.75 J	1.1	0.8 J	0.66 J	0.69 J	0.76 J	0.74 J	0.73 J	0.64 J
Manganese	mg/L					0.084	0.01	0.026	0.014						
Mercury	mg/L	5E-06 U	5E-06 U	2E-06	5E-06 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U						
Molybdenum	mg/L	0.0389	0.0349	0.0331	0.0345	0.037	0.033	0.033	0.032						
Nickel	mg/L					0.039	0.002 U	0.0056	0.0018 J						
Oxidation-Reduction Potential, Field	mV														
pH, Field	pH units	7.28	8.89	8.6	8.59	8.69	8.58	8.55	8.61	8.71	8.6	8.85	8.83	8.85	8.79
Potassium	mg/L			1.05	1.49	2.6 B	0.92 J	1.2	0.91 J	0.84 J	1	0.93 J	0.9 J	0.98 J	0.87 J
Radium-226	pCi/L	0.356	0.547	0.32	0.257	0.303	0.116	0.147	0.171						
Radium-226/228	pCi/L	1.348	1.827	0.595	0.701	0.497	0.339	0.539	0.53						
Radium-228	pCi/L	0.992	1.28	0.275	0.444	0.194 U	0.224 U	0.393	0.359						
Redox Potential, Field	mV	167.6	70.5	-68	88.2										
Selenium	mg/L	7E-05 J	4E-05 J	5E-05	0.0001 U	0.00073 J	0.005 U	0.005 U	0.005 U						
Silver	mg/L					0.0005 J	0.001 U	0.001 U	0.001 U						
Sodium	mg/L			414	405	440 JB	480 B	460 B	440 JB	440	460	470	490	430	450
Strontium	mg/L			0.199	0.19	0.22 B	0.19 B	0.2 B	0.19						
Sulfate	mg/L	493	516	567	521	560 J	570	560	560	560	570	570	540	540	530
Temperature, Field	deg C	15.16	18.6	15.2	12.4					13.1				13	16
Thallium	mg/L	2E-05 J	4E-05 J	1E-05	5.2E-05	0.001 U	0.001 U	0.001 U	0.001 U						
Turbidity, Field	NTU	3.3	5.1	6.7	1.9	61.2	28.9	31.1	5.7	1.2	1.96		3	16.5	0.3
Vanadium	mg/L					0.013			0.005 U						
Zinc	mg/L					0.026	0.02 U	0.02 U	0.02 U						

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
	Date	2021-03-22	2021-03-22	2021-09-19	2022-03-23	2022-09-20	2023-04-05	2023-09-25	2023-09-25	2024-03-14	2024-03-14	2024-09-25	2024-09-25	2025-03-07	2025-09-19
	Sample Type	FD	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L	390	390	360	210 J	380	410		400		400		410	400	390
Aluminum	mg/L				0.064										
Antimony	mg/L				0.002 U		0.002 U		0.002 U		0.002 U		0.002	0.002 U	0.002 U
Arsenic	mg/L				0.0024		0.0019 J		0.0013 J		0.0019 J		0.0042	0.002 J	0.0025 J
Barium	mg/L				0.028		0.027		0.024		0.022		0.042	0.033	0.033
Beryllium	mg/L				0.001 U		0.001 U		0.001 U		0.001 U		0.001	0.001 U	0.001 U
Bicarbonate Alkalinity as CaCO3	mg/L	350	350	320	170 J	320	350		360		350		370	330	360
Bicarbonate Alkalinity as HCO3	mg/L														
Boron	mg/L	0.37	0.37	0.32	0.37 J	0.35	0.32		0.3		0.34		0.38	0.33	0.37 J
Bromide	mg/L														
Cadmium	mg/L				0.00019		0.001 U		0.001 U		0.001 U		0.0001	0.001 U	0.001 U
Calcium	mg/L	3.1	3	2.7	2.9	2.4	2.4		2.6		2.6		3	2.6	2.9 J
Carbonate Alkalinity as CaCO3	mg/L	39	41	38	42	54	64		40		46		48	71	34 J
Chloride	mg/L	90	87	110	120	110	130		89		73		210	100	130
Chromium	mg/L				0.012 J		0.0046 J		0.0019 J		0.005 U		0.014	0.0099	0.0072
Cobalt	mg/L				0.00027 J		0.00034 J		0.001 U		0.001 U		0.00056	0.00072 J	0.00035 J
Conductivity, Field	uS/cm	2005	2005	2047	2124	2145	2229	2053		2084		2385		2098	2248
Copper	mg/L				0.005 U										
Dissolved Oxygen, Field	mg/L				1.62	1.01	0.76	0.76		1.38		1.54		0.86	0.37
Dissolved Solids, Total	mg/L	1300	1300	1400	1200	1200	1300		1200		1100		1300	1200	1300
Fluoride	mg/L	2.2	2.1	2.5	2.5	2.4 U	2.4		2.4		2.2		2.9	2.3	2.5
Iron	mg/L				0.18 J										
Lead	mg/L				0.0005 U		0.001 U		0.001 U		0.001 U		0.00051	0.00067 J	0.001 U
Lithium	mg/L				0.016		0.015		0.017		0.019 J		0.016	0.015	0.016
Magnesium	mg/L	0.82 J	0.76 J	0.7 J	0.77	0.71 J	0.73 J		0.72 J		0.66 J		0.91	0.93 J	1 U
Manganese	mg/L				0.027 J										
Mercury	mg/L				0.0002 U	0.0002 U	0.0002 U		0.0002 U		0.0002 U		0.0002	0.0002 U	0.0002 U
Molybdenum	mg/L				0.034		0.03		0.032		0.035		0.037	0.031	0.035
Nickel	mg/L				0.0019 J										
Oxidation-Reduction Potential, Field	mV				-57.5	-35.5	-45.2	-110.8		30.6		-19.7		-44	-153.2
pH, Field	pH units	8.68	8.68	8.68	8.75	8.7	8.66	8.72		8.6		8.67		8.71	8.8
Potassium	mg/L	1.1	0.98 J	0.78 J	1	0.83 J	0.9 J		0.88 J		0.83 J		1.1	1.2	0.99 J
Radium-226	pCi/L				0.674	0.156	0.113 U		0.144 U		0.225		0.239	0.223 U	0.298 U
Radium-226/228	pCi/L				1.1	0.857 J	0.449 U		1.45 J		0.834 J		0.102 U	0.79 J	0.887 U
Radium-228	pCi/L				0.421 U	0.701 J	0.337 U		1.31 J		0.608 J		-0.137 U	0.567 J	0.59 U
Redox Potential, Field	mV														
Selenium	mg/L				0.0012 J		0.005 U		0.005 U		0.005 U		0.0018	0.005 U	0.005 U
Silver	mg/L				0.001 U										
Sodium	mg/L	470	470	460	460	460	430		470		450		510	460	480
Strontium	mg/L				0.21										
Sulfate	mg/L	430	490	530	500	530	550		550		520		490	450	490
Temperature, Field	deg C	14	14	15	16	17.7	16.7	17.7		18.7		17.8		16.2	19.5
Thallium	mg/L				0.001 U		0.001 U		0.001 U		0.00037 J		0.001	0.001 U	0.001 U
Turbidity, Field	NTU	4.3	4.3	0.4	0.1	8.86	11.8	6.76		3.44		25.07		22.55	19.41
Vanadium	mg/L														
Zinc	mg/L				0.28 J										

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	2003	2003	2003	2003	2003	2003	2003	2003	2003	2003	2003	2003	2003	2003
	Date	2016-12-01	2017-02-08	2017-03-27	2017-05-01	2017-06-12	2018-10-29	2019-09-21	2020-03-24	2020-09-21	2021-04-15	2021-09-29	2022-03-23	2022-05-10	2022-09-20
	Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L	709	680				730	740	750	760	780	770	330	750	780
Aluminum	mg/L			61 J	34	27	28						2.6		
Antimony	mg/L	0.00029	0.0002	0.0014 JB	0.00087 J	0.00074 J	0.00058 J						0.002 U	0.002 U	
Arsenic	mg/L	0.00826	0.0074	0.03	0.019	0.02	0.021						0.018	0.019	
Barium	mg/L	0.175	0.145	0.41 B	0.39	0.29	0.2						0.13	0.13	
Beryllium	mg/L	0.000166	0.000162	0.0031	0.0022	0.0016	0.0011						0.001 U	0.001 U	
Bicarbonate Alkalinity as CaCO3	mg/L						710	710	710	730	740	750	330	740	770
Bicarbonate Alkalinity as HCO3	mg/L														
Boron	mg/L	0.461	0.462	0.46	0.48	0.51	0.48	0.44	0.41	0.45	0.45	0.44	0.59 J		0.45
Bromide	mg/L	2.7	2.25	2.6 J	2.4 J	2 J									
Cadmium	mg/L	8E-05	6E-05	0.001 U	0.001 U	0.001 U	0.001 U						0.0001 U	0.001 U	
Calcium	mg/L	8.98	8.37	12 B	15	12	7.5	5.8	5	5.7	9	5.8	7.7		23
Carbonate Alkalinity as CaCO3	mg/L						27	21	34	28	34	23	5 U	9.5	8.8
Chloride	mg/L	643	700	650	690	560	430	390	500	440	440	480	390		430
Chromium	mg/L	0.0011	0.0839	0.11 B	0.058	0.055	0.037						0.014 J	0.011	
Cobalt	mg/L	0.00251	0.00382	0.023	0.014	0.013	0.0075						0.00094	0.0028	
Conductivity, Field	uS/cm	3638	3676						2692	2760	2783	2824	2641	2619	3094
Copper	mg/L			0.023 B	0.018 B	0.019 B	0.0076						0.005 U		
Dissolved Oxygen, Field	mg/L	1.03	1.28										1.4	0.96	1.95
Dissolved Solids, Total	mg/L	1950	1960	2100 J	2400 J	2100	1800	1600	1400	1600	1800	1700	1600		2700
Fluoride	mg/L	2.7	2.36	2.9	2.8	2.7	3.2	3.6	3.4	3.2	3.3	3.5	3.8	3.6	3 U
Iron	mg/L			67 JB	38	36	19						1.9		
Lead	mg/L	0.00144	0.00165	0.031 J	0.019	0.018	0.0097						0.0011 J	0.0027	
Lithium	mg/L	0.024	0.019	0.084	0.05	0.051	0.051						0.024	0.026	
Magnesium	mg/L	2.26	2.65	9.6 B	7.3	5.9	4	1.5	1.3	1.6	4.2	1.6	1.9	2.2	18
Manganese	mg/L			0.21 B	0.17	0.13	0.062						0.02 J		
Mercury	mg/L	1.7E-05	5E-06 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U						0.0002 U	0.00013 J	0.0002 U
Molybdenum	mg/L	0.105	0.125	0.12	0.1	0.12 J	0.16						0.14	0.13	
Nickel	mg/L			0.074 B	0.039	0.04	0.025						0.0035 J		
Oxidation-Reduction Potential, Field	mV												12.2	42.5	138.4
pH, Field	pH units	8.02	7.84	7.94	7.87	7.83	8.06	8.19	8.26	8.21	8.08	8.08	7.91	8	7.92
Potassium	mg/L	2.61	3.22	11 B	7.2	6	5.9	1.8	1.5	2	5.1	1.8	2.3	2.7	18
Radium-226	pCi/L	0.555	0.193	0.937	0.45	1.48	0.909						1.19	0.169 U	2.62
Radium-226/228	pCi/L	0.975	1.483	2.93	0.95	2.05	1.71						1.7 U	0.68 U	5.52 J
Radium-228	pCi/L	0.42	1.29	2 G	0.5 U	0.57 U	0.797						0.506 U	0.511 U	2.9 J
Redox Potential, Field	mV	4	-122.2												
Selenium	mg/L	0.0013	0.0011	0.0068	0.0034 J	0.0046 J	0.0017 J						0.0025 J	0.0026 J	
Silver	mg/L			0.00074 J	0.00023 J	0.00061 J	0.0005 J						0.001 U		
Sodium	mg/L	605	628	730 JB	740 B	730	630	620	590	610	630	640	600	610	660
Strontium	mg/L	0.593	0.567	0.84 B	0.94 B	0.69 B	0.52						0.47		
Sulfate	mg/L	77.8	65.3	84 J	84	86	73	74	72	84	76	70	61		66
Temperature, Field	deg C	12.5	13.1						14	16	13	14	15	14.8	18
Thallium	mg/L	4E-05	3E-05 J	0.00031 J	0.001 U	0.001 U	0.0002 J						0.001 U	0.001 U	
Turbidity, Field	NTU	123.9	265.2	530.1	336.7	236.9	1000	60	24.3	43.1	683	19.7	70.7	122	1077.17
Vanadium	mg/L														
Zinc	mg/L			0.11	0.07	0.059	0.041						0.3 J		

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	2003	2003	2003	2003	2003	2003	2003	2003	2016-03	2016-03	2016-03	2016-03	2016-03	2016-03
	Date	2023-04-05	2023-09-22	2023-09-22	2024-03-13	2024-03-13	2024-09-19	2024-09-19	2025-09-15	2016-08-24	2016-10-03	2016-12-01	2017-01-31	2017-03-27	2017-04-27
	Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L	870		830		840		800	790			482	443		
Aluminum	mg/L													0.03 J	0.05 U
Antimony	mg/L	0.00065 J		0.002 U		0.0006 J		0.00067	0.00058 J	0.00096	0.00041	0.0004	0.00026	0.002 U	0.002 U
Arsenic	mg/L	0.031		0.028		0.032		0.028	0.029	0.00059	0.00092	0.0007	0.00063	0.00058 J	0.001 J
Barium	mg/L	0.18		0.15		0.15		0.13	0.14	0.0321	0.0383	0.0256	0.0241	0.026 JB	0.024
Beryllium	mg/L	0.00072 J		0.001 U		0.001 U		0.00036	0.00029 J	1E-05 J	7.2E-05	1E-05 J	6E-06 J	0.001 U	0.001 U
Bicarbonate Alkalinity as CaCO3	mg/L	850		820		810		800	770						
Bicarbonate Alkalinity as HCO3	mg/L														
Boron	mg/L	0.5		0.46		0.47		0.46	0.5 J	0.43	0.35	0.361	0.416	0.43	0.44 B
Bromide	mg/L											0.614	3.5	0.4 J	2.5 U
Cadmium	mg/L	0.001 U		0.001 U		0.001 U		0.00017	0.001 U	0.00012	0.0001	0.00016	6E-05	0.001 U	0.001 U
Calcium	mg/L	7.1		7.1		7.2		7.7	6.8	149	129	128	134	140 B	140
Carbonate Alkalinity as CaCO3	mg/L	14		17		25		5	25						
Chloride	mg/L	390		440		430		350	380	21.7	21.8	22.7	867	22	23
Chromium	mg/L	0.026		0.014		0.017		0.0088	0.011	0.0002	0.0002	0.000162	0.000852	0.00064 JB	0.002 U
Cobalt	mg/L	0.0072		0.0038		0.0046		0.0027	0.003	0.000403	0.000563	0.0005	0.000246	0.00029 J	0.00055 J
Conductivity, Field	uS/cm	2975	2941		2964		2371		3062	1564	1599	1595	1328		
Copper	mg/L													0.0018 JB	0.002 U
Dissolved Oxygen, Field	mg/L	0.84	1.18		1.92		1.09		1.18	4.38	1.15	1.77	2.38		
Dissolved Solids, Total	mg/L	1800		1700		1700		1500	1700	1090	1080	1020	1990	1100	1100 J
Fluoride	mg/L	3.4		3.5		3.4		3.8	3.3	0.2	0.18	0.16	2.33	0.21 J	0.19 J
Iron	mg/L													0.087 JB	0.068 J
Lead	mg/L	0.0079		0.0038		0.0044		0.0018	0.0032	0.000324	0.000456	0.000213	0.000105	0.00026 J	0.001 U
Lithium	mg/L	0.038		0.03		0.033		0.023	0.026	0.03	0.03	0.034	0.031	0.029	0.034
Magnesium	mg/L	3.4		2.7		2.6		2.1	2.2			38.6	40.5	40 B	40
Manganese	mg/L													0.051 B	0.1
Mercury	mg/L	0.0002 U		0.0002 U		0.0002 U		0.0002	0.00014 J	1.1E-05	4E-05	3.9E-05	1.8E-05	0.0002 U	0.0002 U
Molybdenum	mg/L	0.14		0.13		0.13		0.13	0.13	0.0154	0.00646	0.00649	0.00523	0.0049 J	0.0043 J
Nickel	mg/L													0.0015 JB	0.002 U
Oxidation-Reduction Potential, Field	mV	132.1	90.4		56.6		-15.6		-17.5						
pH, Field	pH units	7.94	8.06		7.83		7.91		7.99	7.07	6.91	6.99	6.93	6.93	6.9
Potassium	mg/L	4.2		3.2		3.5		2.5	2.7			4.63	5.03	4.3 JB	4.4
Radium-226	pCi/L	-0.309 U		0.274 U		0.521 U		0.586	-0.072 U	0.306	0.225	0.266	0.854	0.194	0.195
Radium-226/228	pCi/L	3.11 U		1.69		2.23 J		1.83	3.59 J	0.409	1.295	0.44	1.121	0.456	0.541
Radium-228	pCi/L	3.42 U		1.41		1.71 J		1.25 G	3.66	0.103	1.07	0.174	0.267	0.262 U	0.347
Redox Potential, Field	mV									20.9	48.2	50.5	73.5		
Selenium	mg/L	0.0091		0.008		0.0088		0.0071	0.013	0.0002	0.0003	0.0001	0.0001	0.005 U	0.005 U
Silver	mg/L													3E-05 J	0.001 U
Sodium	mg/L	640		700		650		620	680			171	156	150 JB	160 B
Strontium	mg/L											2.95	3.25	3.6 JB	3.7
Sulfate	mg/L	72		72		64		61	49	446	445	362	132	390	420
Temperature, Field	deg C	14.9	16.8		14.9		17.2		19	15.8	15.6	12.8	13		
Thallium	mg/L	0.001 U		0.001 U		0.001 U		0.001	0.001 U	2E-05 J	3E-05 J	2E-05 J	2E-05 J	0.001 U	0.001 U
Turbidity, Field	NTU	160.41	127.73		152.45		157.6		96.87	6.4	9	8.1	4.9	2.1	1.3
Vanadium	mg/L														
Zinc	mg/L													0.02 U	0.02 U

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
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Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	2016-03	2016-03	2016-03	2016-03	2016-03	2016-03	2016-03	2016-03	2016-03	2016-03	2016-03	2016-03	2016-03	2016-03
	Date	2017-06-07	2017-07-14	2018-03-21	2018-09-25	2019-03-15	2019-09-24	2020-03-25	2020-09-21	2021-03-16	2021-09-24	2022-03-28	2022-09-12	2022-12-02	2023-03-29
	Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L			430	430	440 B	450	500	340	340	320	250	290		250
Aluminum	mg/L	0.05 U	0.045 J									0.036 J			
Antimony	mg/L	0.002 U	0.002 U									0.002 U			0.002 U
Arsenic	mg/L	0.00082 J	0.00088 J									0.0021			0.0014 J
Barium	mg/L	0.026	0.025									0.025			0.028
Beryllium	mg/L	0.001 U	0.001 U									0.001 U			0.001 U
Bicarbonate Alkalinity as CaCO3	mg/L			430	430	440 B	450	500	340	340	320	250	290		250
Bicarbonate Alkalinity as HCO3	mg/L														
Boron	mg/L	0.45	0.44	0.43	0.43	0.41	0.39	1.6	1.7	1.7	2.1	2.2 J	2.8		2.5
Bromide	mg/L	2.5 UJ	2.5 U												
Cadmium	mg/L	0.001 U	0.001 U									0.0001 U			0.001 U
Calcium	mg/L	150	140	140	140	120	130	290	330	370	450	450	490		460
Carbonate Alkalinity as CaCO3	mg/L			5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U		5 U
Chloride	mg/L	22 J	22	24	23	23	24	32	50	38	30	24	26		22
Chromium	mg/L	0.002 U	0.002 U									0.005 U			0.005 U
Cobalt	mg/L	0.00019 J	0.00034 J									0.0019			0.0011
Conductivity, Field	uS/cm			1511				2101	2232	2462	2700	2738	2781		2505
Copper	mg/L	0.002 U	0.002 U									0.005 U			
Dissolved Oxygen, Field	mg/L			0.26								0.76	0.4		0.93
Dissolved Solids, Total	mg/L	1000	1000 J	1100	1000	1000	1000	1300	1800	2100	2300	2300 J		2300	2500
Fluoride	mg/L	0.21 J	0.19 J	0.24	0.22	0.19	0.23	0.19	0.13	0.18	0.19	0.15	0.13		0.11
Iron	mg/L	0.064 J	0.087 J									1.8			
Lead	mg/L	0.001 U	0.001 U									0.0005 U			0.001 U
Lithium	mg/L	0.029	0.034									0.036			0.034
Magnesium	mg/L	46	40	40	41	40	42	81	81	94	110	97	110		100
Manganese	mg/L	0.11	0.061									3			
Mercury	mg/L	0.0002 U	0.0002 U									0.0002 U	0.0002 U		0.0002 U
Molybdenum	mg/L	0.004 J	0.0038 J									0.0022 J			0.0016 J
Nickel	mg/L	0.002 U	0.002 U									0.003 J			
Oxidation-Reduction Potential, Field	mV											-52.7	-30.2		-8.7
pH, Field	pH units	6.88	6.93	7.03	7	7.13	7.27	6.93	6.82	6.79	6.65	6.73	6.59		6.65
Potassium	mg/L	4.8	4.6	4.6	4.6	8.4	5.3	6.2	6.3	7.2	6.9	6.9	7.1		7.1
Radium-226	pCi/L	0.201	0.207									0.689	0.107 U		0.303
Radium-226/228	pCi/L	0.59	1.02									2.16	0.939		0.825
Radium-228	pCi/L	0.389	0.816									1.47	0.832		0.522
Redox Potential, Field	mV														
Selenium	mg/L	0.005 U	0.005 U									0.00099 J			0.005 U
Silver	mg/L	0.00041 J	0.00044 J									0.001 U			
Sodium	mg/L	150 B	150 B	160	150	190	190	150	110	130	130	93	96		95
Strontium	mg/L	4.4 B	3.4 J									8.3			
Sulfate	mg/L	440 J	400	400	410	400	360	980	1200	1300	1500	1500	1700		1600
Temperature, Field	deg C			12.6				14	14	14	14	12	14.5		13.5
Thallium	mg/L	0.001 U	0.001 U									0.001 U			0.001 U
Turbidity, Field	NTU	1.4	6.4	1	1.68		4	1	4	6.5	5.1	2.7	11.34		5.01
Vanadium	mg/L														
Zinc	mg/L	0.02 U	0.02 U									0.02 U			

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

		Location	2016-03	2016-03	2016-04	2016-04	2016-04	2016-04	2016-04	2016-04	2016-04	2016-04	2016-04	2016-04	2016-04	2016-04
		Date	2023-09-18	2023-09-18	2016-08-24	2017-01-31	2017-03-27	2017-04-27	2017-06-07	2017-07-14	2018-03-22	2018-09-11	2019-03-15	2019-09-24	2020-03-25	2020-09-21
		Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Unit															
Alkalinity, Total as CaCO3	mg/L		270		50.7						250	290 B	300	340	280
Aluminum	mg/L					0.39 J	0.05 U	0.058	0.05 U						
Antimony	mg/L		0.002 U	0.00116	0.00033	0.00067 JB	0.00087 J	0.002 U	0.00097 J		0.002 U	0.002 U			
Arsenic	mg/L		0.0022 J	0.00421	0.00259	0.0054	0.0044 J	0.0019 J	0.0039 J		0.0016 J	0.0015 J			
Barium	mg/L		0.023	0.117	0.065	0.14 JB	0.16	0.41	0.24		0.091	0.077			
Beryllium	mg/L		0.001 U	4E-05 U	2.2E-05	0.001 U	0.001 U	0.001 U	0.00038 J		0.00058 J	0.00085 J			
Bicarbonate Alkalinity as CaCO3	mg/L		270								250	290 B	300	340	280
Bicarbonate Alkalinity as HCO3	mg/L														
Boron	mg/L		2.4	0.343	0.227	0.27	0.27 B	0.36	0.3		0.38	0.39	0.39	0.87	0.75
Bromide	mg/L				0.896	4 J	7.4 J	9.3 J	4.8 J			1			
Cadmium	mg/L		0.001 U	5E-05	7E-05	0.001 U	0.001 U	0.001 U	0.001 U		0.001 U	0.00021 J			
Calcium	mg/L		470	9.88	47.6	22 B	18	33	24		87	93	96	120	120
Carbonate Alkalinity as CaCO3	mg/L		5 U								5 U	5 U	5 U	5 U	5 U
Chloride	mg/L		18	1060	204	820	1700	2100 J	1100		240	180	200	380	1000
Chromium	mg/L		0.005 U	0.0305	0.00651	0.0054 JB	0.0027	0.002 U	0.0016 J		0.002 U	0.002 U			
Cobalt	mg/L		0.0012	0.000641	0.000173	0.00026 J	0.001 U	0.001 U	0.00027 J		0.001 U	0.00031 J			
Conductivity, Field	uS/cm	2148		6270	1328					2138				2822	6404
Copper	mg/L					0.0024 B	0.002 U	0.002 U	0.002 U						
Dissolved Oxygen, Field	mg/L	1.84		1.04	2.38					3.92					
Dissolved Solids, Total	mg/L		2300	2630	952	1900	3300 J	3600	2400 J		1100	1200	920	1500	2400
Fluoride	mg/L		0.094	1.28	0.5	1.4	1.2	1.2 J	1.1		0.36	0.29	0.32	0.45	0.73
Iron	mg/L					0.38 JB	0.1 U	0.1 U	0.1 U						
Lead	mg/L		0.001 U	0.000238	0.000454	0.00043 J	0.001 U	0.001 U	0.00055 J		0.001 U	0.001 U			
Lithium	mg/L		0.038	0.236	0.035	0.044	0.072	0.066	0.066		0.053	0.05			
Magnesium	mg/L		98		6.97	3.8 B	4.2	13	5.8				38	39	36
Manganese	mg/L					0.0083 B	0.005	0.022	0.01						
Mercury	mg/L		0.0002 U	1.3E-05	7E-06	0.0002 U	0.0002 U	0.0002 U	0.0002 U		0.0002 U	0.0002 U			
Molybdenum	mg/L		0.0016 J	0.0864	0.0728	0.12 J	0.11	0.051	0.093		0.015	0.01			
Nickel	mg/L					0.0034 B	0.002 U	0.002 U	0.0015 J						
Oxidation-Reduction Potential, Field	mV	61.8													
pH, Field	pH units	6.92		8.4	6.93	7.79	7.82	7.8	8.22	7.75	7.62	7.62	7.71	7.76	8.56
Potassium	mg/L		7.4		7.01	7.3 JB	13	7.2	9.3				8.6	7.4	16
Radium-226	pCi/L		0.35	0.656	0.617	0.823	0.651	0.481	0.552 J		0.247	0.307			
Radium-226/228	pCi/L		1.42	1.08	1.328	1.51	1.27	1.19	1.21		0.512	0.482			
Radium-228	pCi/L		1.07	0.424	0.711	0.689	0.614	0.71	0.663		0.265 U	0.175 U			
Redox Potential, Field	mV			-174.3	73.5										
Selenium	mg/L		0.005 U	0.0021	0.0007	0.0026 J	0.0022 J	0.005 U	0.0032 J		0.005 U	0.005 U			
Silver	mg/L					0.00016 J	0.001 U	0.00017 J	7E-05 J						
Sodium	mg/L		89		219	670 JB	710	1400 B	880 B				260	380	980
Strontium	mg/L				1.34	0.94 JB	1.3	1.5 B	1.5						
Sulfate	mg/L		1800	252	326	330	230	190 J	290		420	410	390	520	750
Temperature, Field	deg C	14.6		15.2	13					12.3				13	14
Thallium	mg/L		0.001 U	3E-05 J	1E-05 J	0.001 U	0.001 U	0.001 U	0.001 U		0.001 U	0.001 U			
Turbidity, Field	NTU	5.48		9.1	4.9	6.4	2.8	2.8	6.4	3	1.28		4	60.9	
Vanadium	mg/L														
Zinc	mg/L					0.02 U	0.02 U	0.02 U	0.02 U						

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	2016-04	2016-04	2016-04	2016-04	2016-04	2016-04	2016-04	2016-04	2016-05	2016-05	2016-05	2016-05	2016-05	2016-05
	Date	2021-04-15	2021-11-03	2022-03-28	2022-09-12	2022-12-02	2023-03-29	2023-09-18	2023-09-18	2016-06-08	2016-08-25	2016-10-05	2016-12-01	2017-02-01	2017-03-27
	Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L	300	280	260	290		250		270				229	211	
Aluminum	mg/L			0.23											0.3 J
Antimony	mg/L			0.002 U			0.002 U		0.002 U		0.00015	0.0001 J	8E-05	4E-05 J	0.002 U
Arsenic	mg/L			0.00091 J			0.005 U		0.005 U		0.00078	0.00074	0.00051	0.00028	0.005 U
Barium	mg/L			0.053			0.048		0.042		0.052	0.0432	0.0382	0.0331	0.049 JB
Beryllium	mg/L			0.001 U			0.001 U		0.001 U		0.000107	6E-05 J	3.4E-05	8E-06 J	0.001 U
Bicarbonate Alkalinity as CaCO3	mg/L	300	280	260	290		250		270						
Bicarbonate Alkalinity as HCO3	mg/L														
Boron	mg/L	2.3	3.3	3 J	3		2.9		2.9		0.116	0.088	0.088	0.11	0.1
Bromide	mg/L												0.552	0.155	0.17 J
Cadmium	mg/L			0.0001 U			0.001 U		0.001 U		3E-05	2E-05 J	1E-05 J	8E-06 J	0.001 U
Calcium	mg/L	520	540	560	460		550		550		40.2	35.8	45	39.7	66 B
Carbonate Alkalinity as CaCO3	mg/L	5 U	5 U	5 U	5 U		5 U		5 U						
Chloride	mg/L	46	29	25	26		20		17		16.3	17.2	16.9	11.4	9.2
Chromium	mg/L			0.0046 J			0.0031 J		0.0028 J		0.0015	0.0012	0.000802	0.000582	0.0017 JB
Cobalt	mg/L			0.0014			0.00043 J		0.00035 J		0.00299	0.00267	0.00158	0.000274	0.00042 J
Conductivity, Field	uS/cm	2948	2831	3032	2858		2548	2168			717	670	694	708	
Copper	mg/L			0.0071 J											0.00073 JB
Dissolved Oxygen, Field	mg/L			1.74	0.52		0.69	1.32			7.62	8.64	7.9	9.83	
Dissolved Solids, Total	mg/L	2600	2700	2400 J		2500	2600		2400		474	406	430	388	500
Fluoride	mg/L	0.15	0.15	0.15	0.13		0.1		0.096		0.19	0.19	0.19	0.18	0.2
Iron	mg/L			0.86											0.45 JB
Lead	mg/L			0.0005 U			0.001 U		0.001 U		0.00194	0.00137	0.000848	0.000206	0.00036 J
Lithium	mg/L			0.035			0.03		0.03		0.019	0.016	0.011	0.012	0.011
Magnesium	mg/L	110	100	110	90		94		89				18.1	19.6	22 B
Manganese	mg/L			1.7											0.0099 B
Mercury	mg/L			0.0002 U	0.0002 U		0.0002 U		0.0002 U		8E-06	1E-05	1.7E-05	5E-06 U	0.0002 U
Molybdenum	mg/L			0.002 U			0.0016 J		0.0011 J		0.00109	0.00115	0.00231	0.00071	0.00064 J
Nickel	mg/L			0.0037 J											0.0013 JB
Oxidation-Reduction Potential, Field	mV			69.2	79.2		183.8	189.7							
pH, Field	pH units	6.73	6.61	6.68	6.56		6.56	6.95		7.88	7.89	7.93	7.79	7.8	7.48
Potassium	mg/L	9.3	8.2	8.3	7		8.6		8.4				2.72	2.35	2.4 JB
Radium-226	pCi/L			0.595	0.385 U		0.186 U		0.231		0.5	0.369	0.299	0.4	0.176
Radium-226/228	pCi/L			1.37	1.22 U		0.763		0.881		1.027	0.703	1.429	0.40713	0.365 U
Radium-228	pCi/L			0.772	0.839 U		0.577		0.65		0.527	0.334	1.13	0.00713	0.189 U
Redox Potential, Field	mV										162.5	206.5	119.4	162.7	
Selenium	mg/L			0.005 U			0.005 U		0.005 U		0.0005	0.0005	0.0002	0.0001	0.005 U
Silver	mg/L			0.001 U											0.001 U
Sodium	mg/L	100	77	73	57		63		61				84.5	69.3	71 JB
Strontium	mg/L			7.6									0.879	0.89	1.1 JB
Sulfate	mg/L	1800	1800	1800	1700		1700		1500		138	120	116	132	150
Temperature, Field	deg C	12	14	11	15.5		12.8	14.4			18.2	16.8	13	11.8	
Thallium	mg/L			0.001 U			0.001 U		0.001 U		2E-05 J	0.0002 U	2E-05 J	3E-05 J	0.001 U
Turbidity, Field	NTU	253	143	71.7	18.98		7.41	5.59		8.5	280.1	160.9	56.6	9.6	5.4
Vanadium	mg/L														
Zinc	mg/L			0.02 U											0.02 U

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	2016-05	2016-05	2016-05	2016-05	2016-05	2016-05	2016-05	2016-05	2016-05	2016-05	2016-05	2016-05	2016-06	2016-06
	Date	2017-04-27	2017-06-08	2017-07-14	2023-03-29	2023-09-19	2023-09-19	2024-03-08	2024-03-08	2024-09-16	2024-09-16	2025-03-12	2025-09-17	2016-08-25	2016-10-03
	Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L				210		190		250		200	230	200		
Aluminum	mg/L	0.05 U	0.5	0.55											
Antimony	mg/L	0.00072 J	0.00067 J	0.002 U	0.002 U		0.002 U		0.002 U		0.00064	0.002 U	0.002 U	0.00019	0.00025
Arsenic	mg/L	0.005 U	0.00088 J	0.00079 J	0.0055		0.0018 J		0.0028 J		0.0079 J	0.0029 J	0.0017 J	0.00225	0.0023
Barium	mg/L	0.043	0.044 B	0.038	0.056		0.035		0.049		0.046	0.048	0.05	0.0707	0.0649
Beryllium	mg/L	0.001 U	0.00067 J	0.001 U	0.001 U		0.001 U		0.001 U		0.001	0.001 U	0.001 U	0.000198	0.000143
Bicarbonate Alkalinity as CaCO3	mg/L				210		190		250		200	230	200		
Bicarbonate Alkalinity as HCO3	mg/L														
Boron	mg/L	0.1 JB	0.11	0.1	0.08 J		0.088 J		0.088 J		0.087	0.09 J	0.1 J	0.501	0.424
Bromide	mg/L	0.15 J	0.23 J	0.26 J											
Cadmium	mg/L	0.001 U	0.001 U	0.001 U	0.001 U		0.001 U		0.001 U		0.001 U	0.001 U	0.001 U	1E-05 J	2E-05 J
Calcium	mg/L	53	40	31	59		39		68		42	65	48	5.87	5.51
Carbonate Alkalinity as CaCO3	mg/L				5 U		5 U		5 U		5	5 U	5 U		
Chloride	mg/L	9.6	14	16	6.2		12		6		15	6.3	12	545	560
Chromium	mg/L	0.002 U	0.0033	0.0025	0.0041 J		0.0024 J		0.004 J		0.003	0.005 U	0.0029 J	0.0092	0.077
Cobalt	mg/L	0.00028 J	0.0011	0.00088 J	0.0027		0.00067 J		0.00085 J		0.0026	0.00082 J	0.00036 J	0.00208	0.00283
Conductivity, Field	uS/cm					648		826		677		763	772	2898	2931
Copper	mg/L	0.002 U	0.0039	0.0042 B											
Dissolved Oxygen, Field	mg/L					9.82		8.75		9.89		9.71	8.81	0.6	0.58
Dissolved Solids, Total	mg/L	460 J	410	400 J	410		400		460		340	460	370	1560	1560
Fluoride	mg/L	0.21	0.22	0.22	0.13		0.14		0.16		0.22	0.19	0.23	5.28	5.09
Iron	mg/L	0.1 U	0.93	0.78											
Lead	mg/L	0.001 U	0.0012	0.00077 J	0.0036		0.00092 J		0.0013		0.0046	0.0018	0.00066 J	0.00371	0.00151
Lithium	mg/L	0.013	0.012	0.014	0.01		0.011		0.013		0.013	0.012	0.01	0.029	0.024
Magnesium	mg/L	20	19	16	24		19		24		18	25	22		
Manganese	mg/L	0.005 U	0.022	0.02											
Mercury	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U		0.0002 U		0.0002 U		0.0002	0.0002 U	0.0002 U	5E-06 J	1.1E-05
Molybdenum	mg/L	0.01 U	0.0012 J	0.01 U	0.0014 J		0.005 U		0.0011 J		0.0024	0.005 U	0.0015 J	0.0595	0.0952
Nickel	mg/L	0.002 U	0.0026	0.0027											
Oxidation-Reduction Potential, Field	mV					185.7		135.4		92.5		80.7	63.5		
pH, Field	pH units	7.82		8.01		7.99		7.59		7.82		7.7	7.88	8.51	8.36
Potassium	mg/L	2.3	2.5	2.3	2.5		2.2		2.4		2.6	2.4	2.2		
Radium-226	pCi/L	0.14	0.0681 U	0.13	0.151 U		0.175 U		0.0164 U			-0.0488 U	0.113 U	0.325	0.818
Radium-226/228	pCi/L	0.0784 U	0.0846 U	0.575	0.33 U		J		0.0257 U			0.398 U	0.54 J	0.756	2.268
Radium-228	pCi/L	-0.0618 U	0.0165 U	0.445	0.178 U		0.413 U		0.00936 U			0.447 U	0.426 U	0.431	1.45
Redox Potential, Field	mV													72.2	60.6
Selenium	mg/L	0.005 U	0.005 U	0.005 U	0.005 U		0.005 U		0.00091 J		0.005 U	0.005 U	0.005 U	0.0003	0.0002
Silver	mg/L	0.001 U	0.001 U	0.0013											
Sodium	mg/L	74 B	82	74 B	58		74		62		74	62	79		
Strontium	mg/L	1.1	0.87 B	0.81											
Sulfate	mg/L	160	140	130	150		140		160		130	160	140	103	96.5
Temperature, Field	deg C					18.1		14.7		17.4		16	22.4	19.1	16
Thallium	mg/L	0.001 U	0.001 U	0.001 U	0.001 U		0.001 U		0.001 U		0.00069 J	0.001 U	0.001 U	3E-05 J	2E-05 J
Turbidity, Field	NTU	13.6		7.7		18.91		94.65		9.49		6.08	4.62	99.6	45.2
Vanadium	mg/L														
Zinc	mg/L	0.02 U	0.02 U	0.02 U											

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	2016-06	2016-06	2016-06	2016-06	2016-06	2016-06	2016-06	2016-06	2016-06	2016-06	2016-06	2016-06	2016-06	2016-06
	Date	2016-12-01	2017-02-01	2017-03-27	2017-04-27	2017-06-08	2017-07-14	2018-03-22	2018-09-25	2018-09-25	2019-03-26	2019-09-22	2020-03-15	2020-03-15	2020-09-17
	Sample Type	N	N	N	N	N	N	N	FD	N	N	N	FD	N	N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L	490	554						490	490	510	500	510	510	480
Aluminum	mg/L			3.7 J	0.17	3.6	1.7								
Antimony	mg/L	0.00023	0.00026	0.00047 JB	0.00078 J	0.002 U	0.002 U								
Arsenic	mg/L	0.00195	0.00214	0.0034 J	0.0017 J	0.0026 J	0.0024 J								
Barium	mg/L	0.0525	0.0515	0.068 JB	0.05	0.064 B	0.059								
Beryllium	mg/L	3.4E-05	6.8E-05	0.001 U	0.001 U	0.00035 J	0.001 U								
Bicarbonate Alkalinity as CaCO3	mg/L								460	470	460	470	470	470	460
Bicarbonate Alkalinity as HCO3	mg/L														
Boron	mg/L	0.418	0.463	0.5	0.52 B	0.52	0.5		0.48	0.49	0.5	0.45	0.46	0.48	0.46
Bromide	mg/L	2.18	1.85	2.4 J	2.1 J	2.3 J	2.1 J								
Cadmium	mg/L	3E-05	4E-05	0.00061 J	0.001 U	0.001 U	0.001 U								
Calcium	mg/L	4.6	4.45	5 B	3.5	4.1	4		4.4	4.8	4.9	4.4	4.1	4.2	5.1
Carbonate Alkalinity as CaCO3	mg/L								26	23	41	35	36	36	24
Chloride	mg/L	515	548	550	550	570	540		600	620	580	540	650	660	630
Chromium	mg/L	0.0205	0.0625	0.068 JB	0.022	0.058 J	0.062								
Cobalt	mg/L	0.00156	0.00106	0.0019	0.00068 J	0.0038	0.0018								
Conductivity, Field	uS/cm	3126	2933					2792					2888	2888	2979
Copper	mg/L			0.005 JB	0.002 U	0.0071	0.007 B								
Dissolved Oxygen, Field	mg/L	1.02	1.4					0.38							
Dissolved Solids, Total	mg/L	1570	1540	1600	1600 J	1700	1600 J		1400	1400	1600	1500	1600	1600	1400
Fluoride	mg/L	4.89	5.2	6	5.9	6.3	6.1		5.8	5.7	5.6	5.8	5.5	5.5	5.5
Iron	mg/L			3.4 JB	0.24	3.3	1.7								
Lead	mg/L	0.00039	0.000607	0.0016 J	0.001 U	0.0013	0.00083 J								
Lithium	mg/L	0.027	0.034	0.034	0.032	0.031	0.032								
Magnesium	mg/L	1.28	1.4	1.7 B	1	1.8	1.3		1.4	1.4	1.6	1.4	1.3	1.4	1.5
Manganese	mg/L			0.022 B	0.0068	0.019	0.018								
Mercury	mg/L	1.6E-05	3E-06 J	0.0002 U	0.0002 U	0.0002 U	0.0002 U								
Molybdenum	mg/L	0.0674	0.0804	0.091 J	0.076	0.074	0.073								
Nickel	mg/L			0.031 B	0.029	0.13	0.05								
Oxidation-Reduction Potential, Field	mV														
pH, Field	pH units	8.36	8.45	8.44	8.49	8.39	8.28	8.43		8.24	8.52	8.59	8.47	8.47	8.52
Potassium	mg/L	3.45	10.5	7.2 JB	6	5.6	4.8		3	3.4	4.8	3.8	2.7	2.9	2.9
Radium-226	pCi/L	0.392	0.252	0.163	0.163	0.195	0.152								
Radium-226/228	pCi/L	1.052	0.604	0.381	0.395	0.362 U	0.651								
Radium-228	pCi/L	0.66	0.352	0.217 U	0.232 U	0.167 U	0.498								
Redox Potential, Field	mV	79.4	107.6												
Selenium	mg/L	0.0003	0.0003	0.005 U	0.005 U	0.005 U	0.001 J								
Silver	mg/L			0.0012	0.001 U	9.1E-05 J	0.00017 J								
Sodium	mg/L	637	499	610 JB	620	590	600 B		600	610	600	590	600	610	610
Strontium	mg/L	0.274	0.269	0.3 JB	0.29	0.24 B	0.27								
Sulfate	mg/L	95.1	94.8	110	110	120	110		100	100	110	110	100	100	99
Temperature, Field	deg C	12.9	12					13.3					13	13	14
Thallium	mg/L	2E-05 J	2E-05 J	0.001 U	0.001 U	0.001 U	0.001 U								
Turbidity, Field	NTU	52.9	48.5	43.5	68.6	59.1	30.7	49		43.9		71	37.6	37.6	24.1
Vanadium	mg/L														
Zinc	mg/L			0.0097 J	0.02 U	0.02 U	0.02 U								

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	2016-06	2016-06	2016-06	2016-06	2016-06	2016-06	2016-06	2016-06	2016-06	2016-06	2016-06	2016-06	2016-06	2016-06
	Date	2021-03-17	2021-09-24	2022-03-28	2022-09-12	2022-12-02	2023-03-28	2023-09-15	2023-09-15	2024-03-08	2024-03-08	2024-09-20	2024-09-20	2025-03-26	2025-09-10
	Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L	490	510	480	530		510		530		520		490	480	470
Aluminum	mg/L			0.1											
Antimony	mg/L			0.002 U			0.002 U		0.002 U		0.002 U		0.002	0.002 U	0.002 U
Arsenic	mg/L			0.0011 J			0.00093 J		0.004 J		0.0015 J		0.0023	0.0019 J	0.0014 J
Barium	mg/L			0.058			0.063		0.079		0.072		0.071	0.078	0.061
Beryllium	mg/L			0.001 U			0.001 U		0.001 U		0.001 U		0.001	0.001 U	0.001 U
Bicarbonate Alkalinity as CaCO3	mg/L	470	470	460	490		480		500		490		460	450	440
Bicarbonate Alkalinity as HCO3	mg/L														
Boron	mg/L	0.5	0.46	0.47 J	0.47		0.47		0.43		0.47		0.45	0.5	0.48 J
Bromide	mg/L														
Cadmium	mg/L			0.0001 U			0.001 U		0.001 U		0.001 U		0.00013	0.00011 J	0.001 U
Calcium	mg/L	5	4.8	4.5	4.8		4.4		5.2		5.4		5.6	5.8	5
Carbonate Alkalinity as CaCO3	mg/L	26	47	21	43		30		23		30		31	31	33
Chloride	mg/L	620	630	660	630		640		650		650		640	610	610
Chromium	mg/L			0.0023 J			0.008		0.02		0.19		0.011	0.011	0.0036 J
Cobalt	mg/L			0.00028 J			0.00025 J		0.0025		0.0015		0.0011	0.0013	0.001 U
Conductivity, Field	uS/cm	2946	2972	3114	3040		3137	3103		3108		3047		3097	3123
Copper	mg/L			0.005 U											
Dissolved Oxygen, Field	mg/L			1.5	2.49		1.83	2.1		3.02		0.9		1.68	0.59
Dissolved Solids, Total	mg/L	1700	1400	1400 J		1500	1600		1600		1600		2600	1600	1600
Fluoride	mg/L	5.1	5.4	5.4	5.7		5.5		5.5		5.6		5.7	4.9	5.1
Iron	mg/L			0.077 J											
Lead	mg/L			0.0005 U			0.001 U		0.0026		0.0011		0.0014	0.0018	0.00065 J
Lithium	mg/L			0.02			0.021		0.027		0.025		0.022	0.027	0.021
Magnesium	mg/L	1.4	1.3	1.3	1.5		1.2		1.9		1.6		1.8	1.9	1.4
Manganese	mg/L			0.011											
Mercury	mg/L	0.0002 U		0.0002 U	0.0002 U		0.0002 U		0.0002 U		0.0002 U		0.0002	0.0002 U	0.0002 U
Molybdenum	mg/L			0.056			0.062		0.058		0.07		0.057	0.058	0.056
Nickel	mg/L			0.011											
Oxidation-Reduction Potential, Field	mV			52.6	10.4		142.1	4.7		113.7		67		70.5	-161.8
pH, Field	pH units	8.3	8.28	8.57	8.32		8.31	8.36		8.22		8.31		8.34	8.57
Potassium	mg/L	2.1	3.7	3.1	4.8		3.3		3.7		3.6		2.7	3.3	2.3
Radium-226	pCi/L			0.0869 U	0.278 U		0.148 U		0.235 U		0.419 J		0.211 U	0.437	1.34 J
Radium-226/228	pCi/L			0.347 U	0.716		0.619		1.48 J		0.816 J		1.54	1.08	4.14 J
Radium-228	pCi/L			0.26 U	0.437 U		0.471 U		1.24 J		0.397 U		1.33 G	0.639 U	2.8
Redox Potential, Field	mV														
Selenium	mg/L			0.005 U			0.005 U		0.005 U		0.005 U		0.005	0.005 U	0.005 U
Silver	mg/L			0.001 U											
Sodium	mg/L	620	630	670	700		630		660		640		670	670	660
Strontium	mg/L			0.34											
Sulfate	mg/L	96	99	98	100		98		100		100		97	90	91
Temperature, Field	deg C	14	14	13	16.6		13.9	16.1		13.6		18.8		13.6	15.8
Thallium	mg/L			0.001 U			0.001 U		0.001 U		0.001 U		0.001	0.001 U	0.001 U
Turbidity, Field	NTU	26.1	15.2	5.8	12.11		12.16	127.3		56.04		83.2		108.6	34.4
Vanadium	mg/L														
Zinc	mg/L			0.02 U											

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
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Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	2016-07	2016-07	2016-07	2016-07	2016-07	2016-07	2016-07	2016-07	2016-07	2016-07	2016-07	2016-07	2016-07	2016-07
	Date	2016-08-24	2016-10-05	2016-11-30	2017-01-31	2017-03-22	2017-04-27	2017-08-10	2018-04-05	2018-10-23	2019-03-26	2019-09-22	2020-03-15	2020-03-24	2020-09-17
	Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L			514	483				360	300	430	320	360	320	350
Aluminum	mg/L					57 J	9.8	40							
Antimony	mg/L	0.00126	0.00091	0.00079	0.00045	0.0015 J	0.0024	0.0017 JB							
Arsenic	mg/L	0.00772	0.00705	0.00666	0.0042	0.016	0.0034 J	0.016							
Barium	mg/L	0.107	0.141	0.115	0.188	0.83 JB	0.7	1.3							
Beryllium	mg/L	0.000368	0.00027	0.000183	0.000428	0.0026	0.00091 J	0.0028							
Bicarbonate Alkalinity as CaCO3	mg/L								190	120	72	59	45	5 U	160
Bicarbonate Alkalinity as HCO3	mg/L														
Boron	mg/L	0.313	0.297	0.348	0.365	0.4	0.42 B	0.44	0.45	0.42	0.38	0.39	0.41	0.28	0.41
Bromide	mg/L			5.48	0.308	4.5 J	8 J	5.5							
Cadmium	mg/L	7E-05	8E-05 J	0.0001	8E-05	0.001 U	0.001 U	0.00059 J							
Calcium	mg/L	13.3	11.5	8.2	9.9	15 B	25	41	12	12	6.3	7.8	6	34	9.7
Carbonate Alkalinity as CaCO3	mg/L								170	180	350	260	310	110	190
Chloride	mg/L	421	609	643	23.6	1000	1900	1200	1200	1100	810	1000	1100	970	1100
Chromium	mg/L	0.0015	0.0022	0.00163	0.00322	0.063 J	0.011	0.059							
Cobalt	mg/L	0.00105	0.000905	0.000573	0.00167	0.016	0.0028	0.015							
Conductivity, Field	uS/cm	2883	3250	2246	3388				4913				3442	4166	4034
Copper	mg/L					0.044 JB	0.0079	0.04 B							
Dissolved Oxygen, Field	mg/L	3.47	3.81	3.75	1.94				2.48						
Dissolved Solids, Total	mg/L	1740	1850	1900	1000	2300	3900 J	2500 J	2300	1800	2100	1900	1800 J	1900	1800
Fluoride	mg/L	1.89	2.04	1.94	0.18	2.3	1.6	2.6	2.8	2.9	2.6	3.3	3.1	2.5	3.1
Iron	mg/L					49 JB	8.5	47							
Lead	mg/L	0.00336	0.00292	0.00215	0.00336	0.031 J	0.0054	0.036 B							
Lithium	mg/L	0.235	0.193	0.202	0.163	0.16	0.062	0.19							
Magnesium	mg/L			1.36	2.83	11 B	8.3	12	3.9	3.4	2.6	2.3	2.3	0.88 J	3.1
Manganese	mg/L					0.24 B	0.075	0.31							
Mercury	mg/L	1.2E-05	1.7E-05	8E-06	5E-05 J	0.0002 U	0.0002 U	0.0002 U							
Molybdenum	mg/L	0.0808	0.0841	0.0953	0.0689	0.092 J	0.056	0.11 B							
Nickel	mg/L					0.043	0.0086	0.051							
Oxidation-Reduction Potential, Field	mV														
pH, Field	pH units	10.86	10.56	10.61	10.01	9.94	9.44	9.1	9.49	9.75	10.41	10.4	9.85	11.98	9.65
Potassium	mg/L			33.9	24.1	23 JB	6.5	19	6.6	6.8	8.4	4.4	4.3	7.4	4.3
Radium-226	pCi/L	0.427	0.977	1.13	1.18	2.63	6.4	3.74 J							
Radium-226/228	pCi/L	0.427	3.077	2.17	2.84	4.35	12.7	8.09 J							
Radium-228	pCi/L		2.1	1.04	1.66	1.72 G	6.29 G	4.34 G							
Redox Potential, Field	mV	6.4	63	20.4	22										
Selenium	mg/L	0.0008	0.001	0.0007	0.0008	0.004 J	0.0015 J	0.0052							
Silver	mg/L					0.00078 J	0.00019 J	0.0037							
Sodium	mg/L			562	635	930 JB	1300	1000	920	850	840	760	730	640	790
Strontium	mg/L			0.624	0.815	1.3 JB	2.3	2.8 B							
Sulfate	mg/L	229	235	178	371	120	99	77	60	49	46	36	36	30	27
Temperature, Field	deg C	15.6	15.3	14.1	12.8				13.8				13	14	15
Thallium	mg/L	8.4E-05	9E-05 J	4E-05 J	6.1E-05	0.00052 J	0.001 U	0.00066 J							
Turbidity, Field	NTU	213	98.2	88.1	455.1	850	13721	1037	174	81.4		32	9.8	14.1	7.1
Vanadium	mg/L					0.066									
Zinc	mg/L					0.12	0.02	0.12							

Notes:
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N = Normal environmental sample
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mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
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B: Compound was found in the blank and sample.
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Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	2016-07	2016-07	2016-07	2016-07	2016-07	2016-07	2016-07	2016-07	2016-07	2016-07	2016-07	2016-07	2016-07	2016-07
	Date	2021-03-23	2021-09-24	2022-03-29	2022-05-09	2022-09-13	2022-10-20	2023-03-28	2023-09-14	2023-09-14	2024-03-07	2024-03-07	2024-09-25	2024-09-25	2025-03-26
	Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L	350	310	310	320	310	290	290		320		300		250	300
Aluminum	mg/L			2.4											
Antimony	mg/L			0.00071 J	0.001 J			0.002 U		0.002 U		0.002 U		0.002	0.0011 J
Arsenic	mg/L			0.0029	0.0022 J			0.003 J		0.0026 J		0.0036 J		0.0028	0.003 J
Barium	mg/L			0.58	0.3			0.54		0.41		0.58		0.55	0.71
Beryllium	mg/L			0.00034 J	0.001 U			0.001 U		0.001 U		0.001 U		0.001	0.00035 J
Bicarbonate Alkalinity as CaCO3	mg/L	31	290	230	5 U	290	210	260		290		270		240	300
Bicarbonate Alkalinity as HCO3	mg/L														
Boron	mg/L	0.32	0.42	0.5 J		0.46		0.44		0.46		0.43		0.43	0.47
Bromide	mg/L														
Cadmium	mg/L			0.00015	0.001 U			0.001 U		0.001 U		0.001 U		0.001	0.00025 J
Calcium	mg/L	8.2	15	23		29		17		13		29		18	26
Carbonate Alkalinity as CaCO3	mg/L	310	24	82	220	16	82	30		29		29		8.5	5 U
Chloride	mg/L	840	1200	1100		1300	1300	1400		1200		1300		1900	1500
Chromium	mg/L			0.0058	0.0029 J			0.0031 J		0.005 U		0.0086		0.0015	0.0061
Cobalt	mg/L			0.0028	0.00092 J			0.00068 J		0.0002 J		0.0019		0.0003	0.001
Conductivity, Field	uS/cm	3449	4555	4443	3565	5341	5141	5797	4254		4707		6905		5371
Copper	mg/L			0.011											
Dissolved Oxygen, Field	mg/L			6.11	6.39	1.65	2.36	2.3	2.62		3.51		2.73		3.49
Dissolved Solids, Total	mg/L	2000	2000	2200		2500 J	2300	2500		2300		2200		3000	2600
Fluoride	mg/L	2.2	3.1	3	2.7	2.9	2.9	2.9		2.9		3		2.5	2.5
Iron	mg/L			3.8											
Lead	mg/L			0.0038	0.0017			0.0013		0.001 U		0.004		0.001	0.0018
Lithium	mg/L			0.046	0.18			0.035		0.036		0.058		0.051	0.048
Magnesium	mg/L	1.4	4.1	5.2	1.2	5.8		4.6		3.9		4.9		5.1	5.9
Manganese	mg/L			0.077											
Mercury	mg/L			0.0002 U	0.0002 U	0.0002 U		0.0002 U		0.0002 U		0.0002 U		0.0002	0.0002 U
Molybdenum	mg/L			0.077	0.081			0.092		0.1		0.086		0.059	0.059
Nickel	mg/L			0.015											
Oxidation-Reduction Potential, Field	mV			26.2	117.8	-33.4	110.5	50	76.1		119.4		-45.8		91
pH, Field	pH units	10.59	8.44	8.73	11.63	8.35	8.81	8.64	8.61		8.69		8.15		8.1
Potassium	mg/L	9.8	3.3	3.5	9	4.7		3.3		3		4.4		3.8	4
Radium-226	pCi/L			1.17	0.93	1.01		0.899		0.881		1.29		0.679	1.17
Radium-226/228	pCi/L			2.33	1.91	1.81		1.96		1.8		3.16		1.29	1.83
Radium-228	pCi/L			1.16	0.979	0.803		1.06		0.921		1.86		0.615 U	0.663 U
Redox Potential, Field	mV														
Selenium	mg/L			0.0016 J	0.005 U			0.005 U		0.005 U		0.005 U		0.005	0.0011 J
Silver	mg/L			0.0015											
Sodium	mg/L	670	860	950	620	920		920		910		840		11000	1100
Strontium	mg/L			1.3											
Sulfate	mg/L	26	25	21		27	19	18		17		17		15	23
Temperature, Field	deg C	14	15	11	14.4	15.7	15	13.5	15		13.2		18.2		13
Thallium	mg/L			0.00043 J	0.00047 J			0.001 U		0.001 U		0.001 U		0.001	0.00078 J
Turbidity, Field	NTU	12.6	7	208.8	4.28	254.07	335.01	57.07	14.04		268.29		12.92		75.05
Vanadium	mg/L														
Zinc	mg/L			0.021											

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

		Location	2016-07	2016-08	2016-08	2016-08	2016-08	2016-08	2016-08	2016-08	2016-08	2016-08	2016-08	2016-08	2016-08	2016-08
		Date	2025-09-11	2016-08-24	2016-10-05	2016-11-30	2017-01-31	2017-03-22	2017-04-27	2017-06-07	2018-09-25	2019-03-26	2019-09-22	2020-03-15	2020-03-24	2020-09-17
		Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Unit															
Alkalinity, Total as CaCO3	mg/L		400			1580	1400				1700	2000	1800	1100	1900	620
Aluminum	mg/L							4.7 J	0.39	8.1						
Antimony	mg/L		0.002 U	0.00134	0.00083	0.00095	0.00078	0.0012 J	0.0051	0.0013 J						
Arsenic	mg/L		0.0024 J	0.00795	0.00691	0.00652	0.00489	0.0054	0.0075	0.014						
Barium	mg/L		0.67	0.312	0.279	0.416	0.446	0.97 JB	0.7	0.76						
Beryllium	mg/L		0.001 U	4E-05 U	0.000182	0.000123	5.9E-05 J	0.001 U	0.001 U	0.005 U						
Bicarbonate Alkalinity as CaCO3	mg/L		400								5 U	5 U	5 U	5 U	5 U	5 U
Bicarbonate Alkalinity as HCO3	mg/L															
Boron	mg/L		0.45 J	0.318	0.286	0.294	0.279	0.22	0.28 B	0.32	0.1	0.056 J	0.071 J	0.24	0.029 J	0.16
Bromide	mg/L					5.56	2.93	3.1 J	25 U	5 J						
Cadmium	mg/L		0.001 U	2E-05 J	3E-05 J	5E-05	1E-05 J	0.001 U	0.001 U	0.001 U						
Calcium	mg/L		29	33.8	48.9	57	80.6	190 B	140	140	340	450	390	190	510	190
Carbonate Alkalinity as CaCO3	mg/L		5 U								140	70	100	63	48	100
Chloride	mg/L		1400	452	645	650	879	700	890	1200 J	920	510	610	1500	270	1400
Chromium	mg/L		0.0026 J	0.0012	0.0033	0.00434	0.00374	0.011 J	0.0027	0.015 J						
Cobalt	mg/L		0.001 U	0.000353	0.00278	0.00172	0.00095	0.0024	0.00039 J	0.0037						
Conductivity, Field	uS/cm		5537	8521	8800	5904	7708							8027	8693	7699
Copper	mg/L							0.026 JB	0.019	0.043 B						
Dissolved Oxygen, Field	mg/L		1.34	10.52	5.81	6.2	4.23									
Dissolved Solids, Total	mg/L		2600	2480	2660	2730	2750	2700	2900 J	3000	2400	2900	2700	2300 J	1700	2300
Fluoride	mg/L		2.7	1.92	1.85	1.56	2.03	2	1.8 J	2.3 J	1.4	0.99	1.1	1.6	0.69	1.4
Iron	mg/L							4.5 JB	0.1 U	8.6						
Lead	mg/L		0.0009 J	0.000143	0.00216	0.00207	0.000987	0.0044 J	0.001 U	0.006						
Lithium	mg/L		0.05	0.665	0.6	0.702	0.652	0.85	0.75	0.64						
Magnesium	mg/L		6			0.41	0.162	0.75 JB	1 U	1.4	1 U	1 U	1 U	1 U	1 U	1 U
Manganese	mg/L							0.031 B	0.005 U	0.051						
Mercury	mg/L		0.0002 U	2.4E-05	7E-06	3.7E-05	9E-06	0.0002 U	0.0002 U	0.0002 U						
Molybdenum	mg/L		0.053	0.121	0.0735	0.0982	0.102	0.094 J	0.12	0.14						
Nickel	mg/L							0.01	0.004	0.013						
Oxidation-Reduction Potential, Field	mV		-179.3													
pH, Field	pH units		8.09	12.52	12.41	12.59	12.45	12.65	12.35	12.42	12.45	12.67	12.43	11.89	12.67	12
Potassium	mg/L		6.1			92.4	99.3	110 JB	77	59	44	48	44	23	36	17
Radium-226	pCi/L		1.42 J	0.768	1.06	0.975	1.43	4.8	4.25	2.11						
Radium-226/228	pCi/L		7.91 J	1.898	2.97	2.005	2.62	6.4	5.53	2.43						
Radium-228	pCi/L		6.5	1.13	1.91	1.03	1.19	1.6	1.27	0.319 U						
Redox Potential, Field	mV			-71.6	-38.5	-81.2	-89.5									
Selenium	mg/L		0.005 U	0.0028	0.0022	0.0019	0.0012	0.002 J	0.0022 J	0.0043 J						
Silver	mg/L							0.001 U	0.001 UJ	0.00026 J						
Sodium	mg/L		1100			704	747	920 JB	1100	1200 B	830	680	740	1100	310	1100
Strontium	mg/L					3.59	4.23	7.2 JB	6.7	5.7 B						
Sulfate	mg/L		22	133	126	120	90.4	71	70	89 J	27	14	16	28	12	23
Temperature, Field	deg C		16.7	16	16.2	13.8	13.1							12	14	15
Thallium	mg/L		0.001 U	9E-05 J	7E-05 J	5E-05 J	3E-05 J	0.001 U	0.001 U	0.001 U						
Turbidity, Field	NTU		37.46	871	253.7	121.7	110.9	108.8	627.3	380.4	17.6		94	6.2	4.2	4.1
Vanadium	mg/L							0.017								
Zinc	mg/L							0.1 U	0.02 U	0.03						

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

		Location	2016-08	2016-08	2016-08	2016-08	2016-09	2016-09	2016-09	2016-09	2016-09	2016-09	2016-09	2016-09	2016-09	2016-09
		Date	2021-03-23	2021-09-24	2022-03-29	2022-05-03	2016-08-23	2016-10-03	2016-11-29	2017-01-30	2017-03-21	2017-04-25	2017-06-06	2017-07-12	2018-03-22	2018-09-13
		Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Unit															
Alkalinity, Total as CaCO3	mg/L		1900	1000	1900	1700			1250	1830	1400					820
Aluminum	mg/L				0.17							1.3	3.3	1.9 B		
Antimony	mg/L				0.002 U	0.002 U	0.00076	0.00087	0.00082	0.00078	0.0014 J	0.0012 J	0.02 U	0.001 JB		
Arsenic	mg/L				0.0012 J	0.0027 J	0.0117	0.0145	0.0149	0.0144	0.026 J	0.016	0.016 J	0.016		
Barium	mg/L				1.5	1.4	0.684	0.566	0.49	0.433	0.42 JB	0.52	0.53	0.52		
Beryllium	mg/L				0.001 U	0.001 U	8.5E-05	3E-05 J	2E-05 J	2E-05 U	0.001 U	0.001 U	0.001 UJ	0.001 U		
Bicarbonate Alkalinity as CaCO3	mg/L		5 U	5 U	5 U	5 U										5 U
Bicarbonate Alkalinity as HCO3	mg/L															
Boron	mg/L		0.1 U	0.17	0.2 U		0.093	0.411	0.126	0.131	0.19	0.16 J	0.18 B	0.16 B		
Bromide	mg/L								6.45	5.69	5.8 J	50 U	7.5	5.8 J		
Cadmium	mg/L				0.0001 U	0.001 U	6E-05 U	6E-05 U	4E-05 J	1E-05 J	0.001 U	0.001 U	0.01 U	0.001 U		
Calcium	mg/L		620	240	660		78.6	202	49.7	42.3	30 B	35	47	55		16
Carbonate Alkalinity as CaCO3	mg/L		35	45	83	65										180
Chloride	mg/L		180	860	110		1500	1520	1490	1520	1600	2000	1700	1600		1800
Chromium	mg/L				0.0024 J	0.005 U	0.0455	0.0371	0.0299	0.0256	0.027 J	0.025	0.029 J	0.025		
Cobalt	mg/L				0.00039 J	0.0002 J	0.00056	0.000324	0.000245	0.000208	0.00092 J	0.00032 J	0.01 U	0.00071 J		
Conductivity, Field	uS/cm		8172	7178	9065	7194	14047	13957	15285	12613					9465	
Copper	mg/L				0.0066							0.013	0.022 B	0.017		
Dissolved Oxygen, Field	mg/L				5.59	1.28	5.1	2.86	2.39	2.91					0.32	
Dissolved Solids, Total	mg/L		2400	1700	2100		4820	4480	4180	3900	4100	4300 J	4300	3900 J		
Fluoride	mg/L		0.53	0.96	0.51	0.63	1.67	1.58	1.02	1.39	1.9 J	2.1 J	1.8	1.5 J		2
Iron	mg/L				0.1 U							0.1 U	1.2	0.55		
Lead	mg/L				0.00079	0.001 U	0.00215	0.000743	0.000281	0.000118	0.0021 J	0.001 U	0.001	0.00068 J		
Lithium	mg/L				0.42	0.37	0.561	0.082	0.392	0.324	0.23	0.3	0.27	0.25		
Magnesium	mg/L		1 U	1 U	0.5 U	1 U			0.058	0.006 J		1 U	10 U	0.22 J		1 U
Manganese	mg/L				0.01 U						0.016 B	0.005 U	0.05 U	0.0041 J		
Mercury	mg/L				0.0002 U	0.0002 U	1.2E-05	4E-06 J	6E-06	5E-06 J	0.0002 U	0.0002 U	0.0002 U	0.0002 U		
Molybdenum	mg/L				0.0088	0.023	0.18	0.155	0.149	0.137	0.19 J	0.17	0.17	0.16		
Nickel	mg/L				0.0054							0.0015 J	0.02 U	0.0031		
Oxidation-Reduction Potential, Field	mV				-77.6	-150.2										
pH, Field	pH units		12.43	11.59	12.49	11.79	12.49	12.6	12.64	12.66	12.55	12.44	12.46	12.49	12.59	12.07
Potassium	mg/L		31	15	28	24			55	48.8	28 JB	31	29	24		15
Radium-226	pCi/L				7.91	2.69	1.06	0.889	1.34	1.65	1.95	1.33	1.93	1.83 J		
Radium-226/228	pCi/L				11.4	2.89	1.924	2.559	1.729	2.472	2.69	2.29	3.76	2.61 J		
Radium-228	pCi/L				3.49	0.2 U	0.864	1.67	0.389	0.822	0.744 U	0.966	1.83	0.772 J		
Redox Potential, Field	mV						-68.6	-135.4	-113.7	-112.6						
Selenium	mg/L				0.0012 J	0.005 U	0.0042	0.0038	0.0037	0.0029	0.0051 J	0.0029 J	0.05 U	0.0034 JB		
Silver	mg/L				0.00073 J							0.001 U	0.00031 J	0.00074 J		
Sodium	mg/L		240	990	210	420			591	997	1700 JB	1600	1700 B	1500		1600
Strontium	mg/L				11				2.74	2.34	1.8 JB	2.6	1.4 B	2.2		
Sulfate	mg/L		6.4	15	4.9 J		77.1	72.2	73	61.7	64	88 J	65	85		74
Temperature, Field	deg C		14	14	10	15.3	15.9	15	13.5	9.3					12.8	
Thallium	mg/L				0.001 U	0.001 U	7E-05 J	4E-05 J	0.0002 U	4E-05 J	0.001 U	0.001 U	0.001 U	0.001 U		
Turbidity, Field	NTU		0.7	0.5	1.2	2.64	8.7	8.6	6.8	2.1	22.3	56.3	35.1	61.3	9	20.8
Vanadium	mg/L															
Zinc	mg/L				0.02 U							0.02 U	0.2 U	0.02 U		

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	2016-09	2016-09	2016-09	2016-09	2016-09	2016-09	2016-09	2016-10	2016-10	2016-10	2016-10	2016-10	2016-10	2016-10
	Date	2019-09-24	2020-03-12	2020-09-14	2021-03-19	2021-09-20	2021-09-20	2022-03-30	2016-08-23	2016-10-03	2016-11-29	2017-01-30	2017-03-21	2017-04-25	2017-06-06
	Sample Type	N	N	N	N	FD	N	N	N	N	N	N	N	N	N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L	1100	1400	1400	1500	1500	1500	1300			217	199	170		
Aluminum	mg/L							0.3						0.05 U	0.5 U
Antimony	mg/L							0.0014 J	0.00027	9E-05 J	0.0002 J	0.00023	0.002 U	0.002 U	0.02 U
Arsenic	mg/L							0.012	0.00323	0.00281	0.00304	0.00443	0.0037 J	0.0025 J	0.05 U
Barium	mg/L							0.28	0.235	0.183	0.162	0.339	0.17 JB	0.17	0.25
Beryllium	mg/L							0.001 U	8E-05 U	0.0001 U	0.0002 U	1E-05 J	0.001 U	0.001 U	0.001 UJ
Bicarbonate Alkalinity as CaCO3	mg/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U							
Bicarbonate Alkalinity as HCO3	mg/L														
Boron	mg/L	0.24	0.21	0.13	0.14	0.13	0.12	0.4 U	0.449	0.386	0.438	0.421	0.56	0.49	0.57 B
Bromide	mg/L										30.4	35.8	35	53	50
Cadmium	mg/L							6.6E-05 J	4E-05 J	0.0001 U	4E-05 J	0.00026	0.001 U	0.001 U	0.01 U
Calcium	mg/L	18	230	79	60	56	52	48	179	209	254	344	380 B	390	440
Carbonate Alkalinity as CaCO3	mg/L	120	120	180	150	75	77	140							
Chloride	mg/L	1200	630	760	750	860	870	870	3600	5000	6040	7380	7800	12000	11000
Chromium	mg/L							0.0097	0.0007	0.0003	0.00461	0.00983	0.00071 J	0.002 U	0.02 U
Cobalt	mg/L							0.00057	0.000699	0.000869	0.00198	0.00275	0.0015	0.0013	0.0069 J
Conductivity, Field	uS/cm		8091	8864	8971	8996	8996	9317	8802	16158	15133	19419			
Copper	mg/L							0.0077 J						0.002 U	0.02 U
Dissolved Oxygen, Field	mg/L							1.14	3.72	2.77	6.96	4.79			
Dissolved Solids, Total	mg/L	2100	2300	2200	2700	2700	2200	2800	6820	9040	11000	12600	9600	17000 J	17000
Fluoride	mg/L	1.9	1.1	0.92	0.97	1	1.1	1.1	0.66	0.5	0.5 J	0.7 J	2.5 U	5 U	1.3 U
Iron	mg/L							0.4 U						0.13	2.9
Lead	mg/L							0.0005 U	0.00143	0.000325	0.000492	0.00257	0.00056 J	0.001 U	0.001 U
Lithium	mg/L							0.12	0.138	0.142	0.189	0.246	0.21	0.23	0.29
Magnesium	mg/L	1.2	0.75 J	0.33 J	1 U	1 U	1 U	0.5 U			67.4	91.1		110	160
Manganese	mg/L							0.01 U					0.68 B	0.52	1.8
Mercury	mg/L							0.00015 J	4E-06 J	5E-06 U	2E-06 J	3E-06 J	0.0002 U	0.0002 U	0.0002 U
Molybdenum	mg/L							0.14	0.0367	0.0128	0.0278	0.0258	0.011 J	0.015	0.011 J
Nickel	mg/L							0.0034 J						0.0053	0.02 U
Oxidation-Reduction Potential, Field	mV							-138.2							
pH, Field	pH units	12.45	12.61	12.6	12.38	12.33	12.33	12.48	9.79	7.48	8.29	7.68	7.31	7.21	7.51
Potassium	mg/L	13	21	12	9.4	9.6	8.8	9.1			30.8	42.9	26 JB	28	29
Radium-226	pCi/L							0.295	1.31	1.47	1.32	0.874	0.869	1.05	1.47
Radium-226/228	pCi/L							0.691 U	2.85	2.5	3.15	2.304	1.71	2.19	3.93
Radium-228	pCi/L							0.396 U	1.54	1.03	1.83	1.43	0.839	1.14	2.45
Redox Potential, Field	mV								70.1	104.1	122.9	103.2			
Selenium	mg/L							0.0031 J	0.001	0.0002 J	0.0005 J	0.0003	0.0015 J	0.005 U	0.05 U
Silver	mg/L							0.0012						0.001 U	0.0008 J
Sodium	mg/L	1200	870	930	980	1100	1000	1100			1510	1370	4700 JB	4400	5900 B
Strontium	mg/L							2.4			12.1	16.2	20 JB	21	27 B
Sulfate	mg/L	56	71	53	44	42	43	43	874	857	897	834	790	1100	640
Temperature, Field	deg C		13	14	13	14	14	14	16.8	15.9	15	11.3			
Thallium	mg/L							0.00049 J	7E-05 J	0.0002 U	5E-05 U	8E-05 J	0.001 U	0.001 U	0.001 U
Turbidity, Field	NTU	103	90.4	37.7	21.6	2.3	2.3	8.7	30.6	8.7	2.4	21.9	4.1	77.3	10.1
Vanadium	mg/L														
Zinc	mg/L							0.02 U						0.02 U	0.2 U

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
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Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	2016-10	2016-10	2016-10	2016-10	2016-10	2016-10	2016-10	2016-10	2016-10	2016-10	2016-10	2016-10	2016-10	2016-10
	Date	2017-07-12	2018-04-06	2018-10-01	2019-03-27	2019-09-24	2020-03-30	2020-09-14	2020-09-14	2021-03-17	2021-09-20	2022-03-30	2022-09-14	2022-10-20	2023-03-27
	Sample Type	N	N	N	N	N	N	FD	N	N	N	N	N	N	N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L		180 B	140	150	130	150	120	120	120	110	36	18	770	25
Aluminum	mg/L	0.035 JB										1 U			
Antimony	mg/L	0.002 U										0.04 U			0.00085 J
Arsenic	mg/L	0.0039 J										0.04 U			0.0044 J
Barium	mg/L	0.24										0.51			0.73
Beryllium	mg/L	0.001 U										0.001 U			0.001 U
Bicarbonate Alkalinity as CaCO3	mg/L		180 B	140	150	130	150	120	120	120	110	36	18	5 U	25
Bicarbonate Alkalinity as HCO3	mg/L														
Boron	mg/L	0.54 B	0.55	0.52	0.51	0.47	0.48	0.5	0.48	0.47	0.43	2.4 U	0.39		0.42
Bromide	mg/L	49													
Cadmium	mg/L	0.001 U										0.002 U			0.0003 J
Calcium	mg/L	500	610	650	550	710	730	680	700	680	650	650	550		670
Carbonate Alkalinity as CaCO3	mg/L		50 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	28	5 U
Chloride	mg/L	12000	14000	16000	13000	15000	18000	16000	15000	15000	15000	19000	15000	7000	16000
Chromium	mg/L	0.0011 J										0.1 U			0.005 U
Cobalt	mg/L	0.0046										0.01 U			0.00087 J
Conductivity, Field	uS/cm		35660				36786	37634	37634	38220	38449	39405	38197	22220	41279
Copper	mg/L	0.002 U										0.1 U			
Dissolved Oxygen, Field	mg/L		1.53									1.48	1.29	1.01	1.08
Dissolved Solids, Total	mg/L	15000 J	20000	23000	16000	24000	37000	26000	26000	23000	22000	23000	18000	11000	25000
Fluoride	mg/L	2.5 U	5 U	2.5 U	2.9	2.5 U	2.5 U	0.31 J	0.33 J	1 U	2.5 U	5 U	2.5 U	0.65	2.5 U
Iron	mg/L	2.8										2 U			
Lead	mg/L	0.001 U										0.0005 U			0.001 U
Lithium	mg/L	0.29										0.51			0.47
Magnesium	mg/L	160	200	210	190	330	220	230	220	220	220	260	200		240
Manganese	mg/L	1.4										0.39			
Mercury	mg/L	0.0002 U								0.0002 U		0.0002 U	0.0002 U		0.0002 U
Molybdenum	mg/L	0.016										0.022			0.018
Nickel	mg/L	0.024										0.1 U			
Oxidation-Reduction Potential, Field	mV											-36.9	-91.9	-16.3	50.1
pH, Field	pH units	7.86	7.1	7.11	7.25	7.27	7.35	7.46	7.46	7.16	7.46	8.82	9.79	12.26	8.61
Potassium	mg/L	29	28	29	31 F1	42	31	32	29	37	60	150	140		120
Radium-226	pCi/L	1.61 J										1.3	2.18		2.45
Radium-226/228	pCi/L	4.91 J										7.56	12.1		17.8
Radium-228	pCi/L	3.29										6.26	9.92		15.3
Redox Potential, Field	mV														
Selenium	mg/L	0.0014 JB										0.1 U			0.0017 J
Silver	mg/L	0.00062 J										0.0008 J			
Sodium	mg/L	6000	7300	7100 B	6900	7600	7400	7900	8100	7500	8000	8900	8400		8400
Strontium	mg/L	26										48			
Sulfate	mg/L	670	540	560	550	350	400	320	350	310	300	360	230	260	170
Temperature, Field	deg C		13.5				14	15	15	14	15	19	15.7	13.5	14.1
Thallium	mg/L	0.001 U										0.001 U			0.00083 J
Turbidity, Field	NTU	10.3	4	2.62		7	14	1.3	1.4	1.2	1.8	7	14.51	45.53	20.25
Vanadium	mg/L														
Zinc	mg/L	0.02 U										0.4 U			

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	2016-10	2016-10	2016-10	2016-10	2016-10	2016-10	2016-11	2016-11	2016-11	2016-11	2016-11	2016-11	2018-01	2018-01
	Date	2023-09-13	2023-09-13	2023-09-13	2024-09-10	2025-04-01	2025-09-10	2016-08-23	2016-08-26	2017-01-30	2017-03-21	2017-04-25	2021-03-17	2019-11-14	2020-03-24
	Sample Type	FD	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L	800		840	50	19 J	29 J			326	290			800	680
Aluminum	mg/L											0.05 U			
Antimony	mg/L	0.0031		0.0026	0.0017	0.01 U	0.002 U	0.00533		0.00068	0.002 U	0.00081 J			
Arsenic	mg/L	0.0062		0.0044 J	0.0026	0.025 U	0.0033 J	0.0038		0.00586	0.0049 J	0.0022 J			
Barium	mg/L	0.51		0.51	0.89	1.4	1.5	0.154		0.681	0.33 JB	0.41			
Beryllium	mg/L	0.001 U		0.001 U	0.001	0.005 U	0.001 U	4E-05 U		9.2E-05	0.001 U	0.001 U			
Bicarbonate Alkalinity as CaCO3	mg/L	5 U		5 U	3.5	19 J	29 J							5 U	5 U
Bicarbonate Alkalinity as HCO3	mg/L														
Boron	mg/L	0.3		0.31	0.27	0.43	0.36 J	0.278		0.3	0.36	0.35	0.48	0.9	0.71
Bromide	mg/L									10.5	10	11 J			
Cadmium	mg/L	0.00023 J		0.001 U	0.00013	0.005 U	0.001 U	0.0002		0.00027	0.00035 J	0.001 U			
Calcium	mg/L	380		370	580	880	760	10.3		25	28 B	34	120	14 B	13
Carbonate Alkalinity as CaCO3	mg/L	73		88	47	5 U	5 U							370	370
Chloride	mg/L	7300		7300	13000	20000	20000		403	2170	2400	2800	6000	1500	2000
Chromium	mg/L	0.01		0.0063	0.009	0.025 U	0.005 U	0.0349		0.00944	0.037 J	0.002 U			
Cobalt	mg/L	0.0015		0.0012	0.0007	0.005 U	0.001 U	0.000731		0.00238	0.00076 J	0.0013			
Conductivity, Field	uS/cm		30140			45456	46509	7110		7954			16763		7311
Copper	mg/L											0.003			
Dissolved Oxygen, Field	mg/L		1.4			1.54	1.35	7.22		3.52					
Dissolved Solids, Total	mg/L	9000 J		11000 J	21000	26000	27000		3060	4400	5200	4900 J	9700	3200	4400
Fluoride	mg/L	0.3 J		0.36 J	2.5	5 U	5 U		2.21	2.01	2.4	2.2 J	0.92	3.3	3.3
Iron	mg/L											0.1 U			
Lead	mg/L	0.0016		0.0012	0.001	0.005 U	0.001 U	0.00261		0.00424	0.0054 J	0.001 U			
Lithium	mg/L	1.2		1.1	0.7	0.34	0.35	0.593		0.086	0.08	0.074			
Magnesium	mg/L	110		110	130	300	270			9.05		11	41	2.3	0.3 J
Manganese	mg/L										0.031 B	0.039			
Mercury	mg/L	0.0002 U		0.0002 U	0.0002	0.0002 U	0.0002 U	8E-06		8E-06	0.0002 U	0.0002 U	0.0002 U		
Molybdenum	mg/L	0.044		0.041	0.017	0.012 J	0.017	0.223		0.248	0.14 J	0.14			
Nickel	mg/L											0.038			
Oxidation-Reduction Potential, Field	mV		-100.4			90.5	-153.2								
pH, Field	pH units		10.85			9.65	7.67	12.23		8.5	8.95	8.35	7.46	12.14	12.09
Potassium	mg/L	620		600	290	66	64			32.5	21 JB	15	30	3.5	2
Radium-226	pCi/L	3.09		2.38	2.05	4.71	3.99	1.44		1.07	0.934	1			
Radium-226/228	pCi/L	10.3		8.76	14.4	25.4	27	2.62		2.041	1.81	1.56			
Radium-228	pCi/L	7.18		6.38	12.4	20.7	23	1.18		0.971	0.872	0.564			
Redox Potential, Field	mV							-93.7		40.3					
Selenium	mg/L	0.0034 J		0.0029 J	0.0024	0.025 U	0.005 U	0.0054		0.0007	0.003 J	0.005 U			
Silver	mg/L											0.0001 J			
Sodium	mg/L	4800		4900	8600	9200	8600			911	1800 JB	1800	3400	1100	1300
Strontium	mg/L									1.72	2.1 JB	2.7			
Sulfate	mg/L	190		200	110	81 J	99 J		529	497	560	750	380	37	39
Temperature, Field	deg C		15.4			12.4	16.1	16.2		12.1			14		14
Thallium	mg/L	0.001 U		0.001 U	0.001	0.005 U	0.001 U	0.000266		0.000105	0.001 U	0.001 U			
Turbidity, Field	NTU		149.77			30.16	20.97	7.1		67.4	22.4	73.2	21.9	42	20.4
Vanadium	mg/L														
Zinc	mg/L											0.015 J			

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	2018-01	2018-01	2018-01	2018-01	2018-01	2018-01	2018-01	2018-01	2018-01	2018-01	2018-02	2018-02	2018-02	2018-02
	Date	2020-09-22	2021-03-22	2021-09-27	2022-03-25	2022-05-09	2022-07-13	2022-07-13	2022-08-19	2022-09-21	2022-09-21	2019-11-14	2020-04-08	2020-11-16	2021-04-08
	Sample Type	N	N	N	N	N	FD	N	N	FD	N	N	N	N	N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L	460	380	290	210	230	300	310	310	250	250		260		270
Aluminum	mg/L				0.26									15	
Antimony	mg/L				0.002 U	0.002 U	0.00064 J	0.00084 J	0.0007 J					0.001 J	
Arsenic	mg/L				0.13	0.13	0.1	0.11	0.11					0.011	
Barium	mg/L				0.75	0.69	0.6	0.65	0.58					1.6	
Beryllium	mg/L				0.001 U	0.001 U	0.001 U	0.001 U	0.001 U					0.00085 J	
Bicarbonate Alkalinity as CaCO3	mg/L	5 U	5 U	5 U	90	37	5 U	5 U	5 U	26	22		260		270
Bicarbonate Alkalinity as HCO3	mg/L														
Boron	mg/L	0.61	0.56	0.45	0.44 J	0.36	0.39	0.39		0.44	0.45	0.35	0.32	0.38	0.34
Bromide	mg/L													16	
Cadmium	mg/L				0.0001 U	0.001 U	0.001 U	0.001 U	0.001 U					0.001 U	
Calcium	mg/L	20	27	37	40	34	32	33		31	31	49 B	54	57	68
Carbonate Alkalinity as CaCO3	mg/L	340	320	290	120	200	270	270	250	220	220		5 U		5 U
Chloride	mg/L	2600	3200	3100	3200	3800	3300	3200		3100	3100	3800	4000	200	4600
Chromium	mg/L				0.0038 J	0.005 U	0.006	0.005 U	0.0031 J					0.22	
Cobalt	mg/L				0.00039 J	0.00019 J	0.00045 J	0.001 U	0.00055 J					0.01	
Conductivity, Field	uS/cm	8200	8597	8727	10152	98.12		10179	10162	10197	10197		11760	10750	11240
Copper	mg/L				0.005 U									0.055	
Dissolved Oxygen, Field	mg/L				2.41	5.58		1.97	0.71	1.93	1.93				
Dissolved Solids, Total	mg/L	4400	5800	4400	5300	6200	5600	5800		4600	4900	4900	5500	6600	7100
Fluoride	mg/L	3.3	3	2.8	2.8	2.7	2.8	2.8	2.7	2.2 U	2.2 U	1.8	1.6	0.4 J	1.5
Iron	mg/L				0.23									58	
Lead	mg/L				0.0005 U	0.001 U	0.0008 J	0.00065 J	0.001 U					0.0092	
Lithium	mg/L				0.04 J	0.008 U	0.0047 J	0.0055 J	0.0069 J					0.075	
Magnesium	mg/L	0.21 J	1 U	0.47 J	0.83	0.25 J	0.24 J	0.44 J	1 U	0.3 J	0.3 J	16	18	19	20
Manganese	mg/L				0.0054 J									0.39	
Mercury	mg/L				0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U				
Molybdenum	mg/L				0.066	0.072	0.053	0.057	0.057					0.16	
Nickel	mg/L				0.017									0.037	
Oxidation-Reduction Potential, Field	mV				-160.3	-225.2		-189.7	-303.3	275.6	275.6				
pH, Field	pH units	11.65	11.32	10.78	9.85	10.59		11.08	10.87	10.86	10.86	6.93	7.97	7.96	7.04
Potassium	mg/L	2.6	2.8	3.5	4.3	3.4	3.3	3.4	3.3	3.3	3.3	8.1	5.6	7.6	6.6
Radium-226	pCi/L				1.46	1.01	1.02	0.905	0.822	0.965	0.96				
Radium-226/228	pCi/L				3.47	1.57	2.64 J	2.19 J	2.01	2.92	2.11				
Radium-228	pCi/L				2.01	0.565 U	1.62 J	1.29 J	1.19	1.95	1.15				
Redox Potential, Field	mV														
Selenium	mg/L				0.0027 J	0.0021 J	0.0034 J	0.0044 J	0.0088					0.005 U	
Silver	mg/L				0.001 U									0.00046 J	
Sodium	mg/L	1600	1800	1900	2600	2200	2300	2100	2200	2100	2100	2200	2400	2200	2500
Strontium	mg/L				3.9									4.9	
Sulfate	mg/L	5 U	35	36	38	36	38	38		42	43	87	65	93	83
Temperature, Field	deg C	16	16	16	12	13.7		17	15.7	15.6	15.6		17	14	19
Thallium	mg/L				0.001 U	0.001 U	0.001 U	0.0002 J	0.0019 J					0.001 U	
Turbidity, Field	NTU	16.8	16.9	14.9	6.3	1.63		47.63	4.4	12.6	12.6		305	358	322
Vanadium	mg/L														
Zinc	mg/L				0.02 U									0.25	

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
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Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	2018-02	2018-02	2018-02	2018-02	2018-02	2018-02	2018-02	2018-02	2018-02	2018-02	2018-02	2018-03	2018-03	2018-03
	Date	2021-11-03	2022-04-20	2023-03-31	2023-09-21	2023-09-21	2024-03-13	2024-03-13	2024-09-24	2024-09-24	2025-03-06	2025-09-18	2019-11-14	2020-04-08	2020-11-16
	Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L	250	270												
Aluminum	mg/L														5.8
Antimony	mg/L			0.0067				0.0012 J		0.00069		0.002 U			0.0023
Arsenic	mg/L			0.0041 J				0.005		0.0052		0.0035 J			0.012
Barium	mg/L			0.54				0.94		0.7		0.73			0.48
Beryllium	mg/L			0.001 U				0.001 U		0.00027		0.001 U			0.0004 J
Bicarbonate Alkalinity as CaCO3	mg/L	250	270												
Bicarbonate Alkalinity as HCO3	mg/L														
Boron	mg/L	0.37	0.39	0.23		0.31		0.31		0.34	0.37	0.33 J	0.31	0.31	0.32
Bromide	mg/L														5.6
Cadmium	mg/L			0.00036 J				0.001 U		9.8E-05		0.001 U			0.00027 J
Calcium	mg/L	56	61	42		43		46		51	56	64	120 B	34	80
Carbonate Alkalinity as CaCO3	mg/L	5 U	5 U												
Chloride	mg/L	4500	4600	3400		2500		3100		3200	3100	4200	5900	1500	52
Chromium	mg/L			0.03				0.096		0.063		0.026			0.016
Cobalt	mg/L			0.0038				0.0047		0.0029		0.0021			0.0033
Conductivity, Field	uS/cm	12120	12570	1483	6149		11167		8749		4880	10975		6569	4938
Copper	mg/L														0.012
Dissolved Oxygen, Field	mg/L			8.1	3.46		4.38		5.9		4.14	2.14			
Dissolved Solids, Total	mg/L	6400	7100	5700		1500		4700		5100	5300	6100	7500	3100	2200
Fluoride	mg/L	1.5	1.5	0.92		1.1		1.3		1.2	1.2	1.5	1.3	1.9	0.87
Iron	mg/L														7.7
Lead	mg/L			0.0046				0.005		0.0032		0.0027			0.0033
Lithium	mg/L			0.038				0.063		0.057		0.068			0.023
Magnesium	mg/L	18	18	11		15		15		15	16	17	33	8.7	11
Manganese	mg/L														0.26
Mercury	mg/L											0.0002 U			
Molybdenum	mg/L			0.047				0.11		0.077		0.053			0.036
Nickel	mg/L														0.017
Oxidation-Reduction Potential, Field	mV			151.7	-106.8		94.7		-9.1		68.7	-160.9			
pH, Field	pH units	7.31	7.51	7.78	7.65		7.8		7.83		7.84	7.71	7.29	8.18	8.15
Potassium	mg/L	5.2	5.1	3.8		5.6		5.2		4.7	4.9	4.8	6.7	3.5	5.1
Radium-226	pCi/L														
Radium-226/228	pCi/L														
Radium-228	pCi/L														
Redox Potential, Field	mV														
Selenium	mg/L			0.005 U				0.005 U		0.005		0.005 U			0.005 U
Silver	mg/L														0.00033 J
Sodium	mg/L	2300	2300	1200		1800		2000		2000	2300	2300	2800	1300	870
Strontium	mg/L														1.9
Sulfate	mg/L	61	74	44		100		73		160	140	37	150	250	230
Temperature, Field	deg C	12	16	13.5	18.2		14.5		18.5		9.3	18.8		18	15
Thallium	mg/L			0.001 U				0.001 U		0.001		0.001 U			0.001 U
Turbidity, Field	NTU	101	58.5	154.07	145.88		106.64		55.67		143.09	34.23		35.1	159
Vanadium	mg/L														
Zinc	mg/L														0.032

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
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Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	2018-03	2018-03	2018-03	2018-03	2018-03	2018-03	2018-03	2018-03	2018-03	2018-03	2018-03	2018-03	2018-03	2018-03
	Date	2021-04-08	2021-11-03	2022-04-20	2022-09-13	2022-09-29	2023-03-01	2023-03-30	2023-04-14	2023-06-13	2023-06-13	2023-08-16	2023-09-21	2023-09-21	2023-10-17
	Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L	500	530	370	330										
Aluminum	mg/L														
Antimony	mg/L						0.00086 J	0.00067 J			0.002 U	0.002 U			0.0011 J
Arsenic	mg/L						0.018	0.0066			0.013	0.01			0.011
Barium	mg/L						0.59	0.13			0.38	0.31			0.31
Beryllium	mg/L						0.001 U	0.001 U			0.001 U	0.001 U			0.001 U
Bicarbonate Alkalinity as CaCO3	mg/L	500	530	370	330										
Bicarbonate Alkalinity as HCO3	mg/L														
Boron	mg/L	0.31	0.38	0.33	0.34			0.43	0.45					0.48	0.43
Bromide	mg/L														
Cadmium	mg/L						0.001 U	0.001 U			0.001 U	0.001 U			0.001 U
Calcium	mg/L	170	140	210	220			220	110					29	52
Carbonate Alkalinity as CaCO3	mg/L	5 U	5 U	5 U	5 U										
Chloride	mg/L	1200	1800	630			500	650	400					980	920
Chromium	mg/L						0.0051	0.0027 J			0.0045 J	0.0055			0.011
Cobalt	mg/L						0.0043	0.0078			0.0061	0.0041			0.0042
Conductivity, Field	uS/cm	5300	6385	3727	3451					3121			5133		
Copper	mg/L														
Dissolved Oxygen, Field	mg/L									3.08			3.24		
Dissolved Solids, Total	mg/L	3100	3600	2200	1600 J		1800	2500	2200					3400	3200
Fluoride	mg/L	0.85	1	0.44			0.59	0.81	0.54		1.1	1.1		0.9	0.96
Iron	mg/L														
Lead	mg/L						0.0013	0.00058 J			0.0011	0.001			0.0037
Lithium	mg/L						0.05	0.073			0.036	0.032			0.041
Magnesium	mg/L	34	30	48	54		26	53			21	6.3		8.5	14
Manganese	mg/L														
Mercury	mg/L				0.00014 J						0.0002 U	0.0002 U			
Molybdenum	mg/L						0.0061	0.0032 J			0.0071	0.0057			0.0067
Nickel	mg/L														
Oxidation-Reduction Potential, Field	mV									111.9			-170.9		
pH, Field	pH units	7.45	7.72	7.1	6.77					7			7.51		
Potassium	mg/L	4.7	5.3	4.2	4.7		3.6	4			3.2	2.5		2.9	2.9
Radium-226	pCi/L					1.42									
Radium-226/228	pCi/L					3.96 J									
Radium-228	pCi/L					2.54 J									
Redox Potential, Field	mV														
Selenium	mg/L						0.005 U	0.005 U			0.005 U	0.005 U			0.00099 J
Silver	mg/L														
Sodium	mg/L	980	1200	460	450		1000	220			1100	1300		1300	1100
Strontium	mg/L														
Sulfate	mg/L	520	470	700			820	820	910					950	950
Temperature, Field	deg C	18	14	17	19					19.2			18.6		
Thallium	mg/L						0.001 U	0.001 U			0.001 U	0.001 U			0.001 U
Turbidity, Field	NTU	70.1	65	15.8	66.5					14.53			31.9		
Vanadium	mg/L														
Zinc	mg/L														

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	2018-03	2018-03	2018-03	2018-03	2018-03	2018-03	2018-03	2018-03	2018-03	2018-03	2018-04	2018-04	2018-04	2018-04
	Date	2023-12-15	2023-12-15	2024-02-22	2024-02-22	2024-03-13	2024-03-13	2024-09-24	2024-09-24	2025-03-06	2025-09-18	2019-11-14	2020-04-08	2020-11-16	2021-04-08
	Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L														340
Aluminum	mg/L													58	
Antimony	mg/L		0.002 U		0.00068 J		0.0021		0.002		0.002 U			0.0021	
Arsenic	mg/L		0.0089		0.012		0.031		0.0084		0.0057			0.079	
Barium	mg/L		0.24		0.32		0.24		0.25		0.11			0.62	
Beryllium	mg/L		0.001 U		0.001 U		0.0011		0.001		0.001 U			0.0032	
Bicarbonate Alkalinity as CaCO3	mg/L														330
Bicarbonate Alkalinity as HCO3	mg/L														
Boron	mg/L		0.42				0.3		0.51	0.53	0.4 J		0.24	0.21	0.19
Bromide	mg/L													0.3 J	
Cadmium	mg/L		0.001 U		0.001 U		0.001 U		0.00011		0.001 U			0.00034 J	
Calcium	mg/L		110		22		65		21	25	200		62	74	62
Carbonate Alkalinity as CaCO3	mg/L														11
Chloride	mg/L		900				64		1300	1000	1100	25	26	28	33
Chromium	mg/L		0.0093		0.014		0.08		0.0086		0.0054			0.24	
Cobalt	mg/L		0.0036		0.0049		0.027		0.0024		0.011			0.088	
Conductivity, Field	uS/cm	2371		3431		4805		5432		4931	3574		1675	1977	2093
Copper	mg/L													0.11	
Dissolved Oxygen, Field	mg/L	3.41		4.08		3.47		2.31		2.89	2.04				
Dissolved Solids, Total	mg/L		3000				1400		3800	3300	3300	860	980	1100	1200
Fluoride	mg/L		0.78		0.5		0.62		0.97	0.84	0.8	0.8	0.67	0.5 U	0.74
Iron	mg/L													120	
Lead	mg/L		0.0031		0.005		0.023		0.0032		0.0018			0.06	
Lithium	mg/L		0.051		0.035		0.033		0.034		0.049			0.074	
Magnesium	mg/L		28		6.5		21		6.3	7.1	42		15	32	17
Manganese	mg/L													1.7	
Mercury	mg/L				0.0002 U						0.0002 U				
Molybdenum	mg/L		0.0052		0.0065		0.062		0.0042		0.0035 J			0.14	
Nickel	mg/L													0.13	
Oxidation-Reduction Potential, Field	mV	-160.5		30.3		-140.8		-94.2		109.5	-158.5				
pH, Field	pH units	7.21		7.85		7.54		7.8		7.58	6.8	6.65	7.2	7.68	7.55
Potassium	mg/L		3.2		3		6.2		2.7	2.9	3.7		3.7	12	5.6
Radium-226	pCi/L														
Radium-226/228	pCi/L														
Radium-228	pCi/L														
Redox Potential, Field	mV														
Selenium	mg/L		0.005 U		0.005 U		0.0027 J		0.005		0.005 U			0.0043 J	
Silver	mg/L													0.0007 J	
Sodium	mg/L		850		1200		400		1200	1400	500		370	300	300
Strontium	mg/L													0.96	
Sulfate	mg/L		960				660		990	940	1000	490	470	460	510
Temperature, Field	deg C	13.7		13.7		15.2		17.2		9.2	21.6		18	16	19
Thallium	mg/L		0.001 U		0.001 U		0.00025 J		0.001		0.001 U			0.0006 J	
Turbidity, Field	NTU	114.36		94.04		107.7		18.55		37.14	19.56		46	854	617
Vanadium	mg/L														
Zinc	mg/L													0.4	

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	2018-04	2018-04	2018-04	2018-04	2018-04	2018-04	2018-04	2018-04	2018-04	2018-04	2018-04	2019-02	2019-02	2019-02
	Date	2022-04-20	2023-03-30	2023-06-13	2023-09-21	2023-09-21	2024-03-13	2024-03-13	2024-09-24	2024-09-24	2025-03-06	2025-09-18	2020-09-15	2021-03-16	2021-03-16
	Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	FD	N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L	380											1800	1700	1700
Aluminum	mg/L														
Antimony	mg/L		0.0024					0.002 U		0.001		0.001 J			
Arsenic	mg/L		0.022					0.0066		0.0033		0.0058			
Barium	mg/L		0.19					0.17		0.019		0.032			
Beryllium	mg/L		0.00099 J					0.001 U		0.001		0.001 U			
Bicarbonate Alkalinity as CaCO3	mg/L	380											5 U	5 U	5 U
Bicarbonate Alkalinity as HCO3	mg/L														
Boron	mg/L	0.27	0.3			0.29		0.44		0.34	0.31	0.27 J	0.1 U	0.1 U	0.1 U
Bromide	mg/L														
Cadmium	mg/L		0.001 U					0.001 U		0.001		0.001 U			
Calcium	mg/L	61	67			72		180		69	93	78	220	250	240
Carbonate Alkalinity as CaCO3	mg/L	5 U											120	52	53
Chloride	mg/L	48	63			61		410		62	34	46	190	180	190
Chromium	mg/L		0.067					0.0049 J		0.0049		0.012			
Cobalt	mg/L		0.022					0.0055		0.00073		0.0026			
Conductivity, Field	uS/cm	2086		2186	1216		1251		2603		1781	2178	8754	8179	8179
Copper	mg/L														
Dissolved Oxygen, Field	mg/L			3.73	4.96		4.73		3.86		4.7	4.21			
Dissolved Solids, Total	mg/L	1300	1400			1500		3000		1500	1000	1400	1900	1800	1700
Fluoride	mg/L	0.69	0.58			0.59		0.76		0.62	0.5	0.54	0.86	0.7	0.73
Iron	mg/L														
Lead	mg/L		0.02					0.0019		0.00071		0.0026			
Lithium	mg/L		0.03					0.039		0.016		0.017			
Magnesium	mg/L	17	21			23		37		18	22	20	1 U	1 U	1 U
Manganese	mg/L														
Mercury	mg/L											0.0002 U			
Molybdenum	mg/L		0.069					0.0041 J		0.043		0.034			
Nickel	mg/L														
Oxidation-Reduction Potential, Field	mV			86.8	40.2		-33.2		54.6		98.6	5.4			
pH, Field	pH units	7.37		7.68	7.6		7.32		7.6		7.77	7.36	12.62	12.47	12.47
Potassium	mg/L	4.3	5.8			5.7		3.5		2.9	4.8	3.2	33	21	21
Radium-226	pCi/L														
Radium-226/228	pCi/L														
Radium-228	pCi/L														
Redox Potential, Field	mV														
Selenium	mg/L		0.0022 J					0.005 U		0.0028		0.0024 J			
Silver	mg/L														
Sodium	mg/L	350	400			430		460		450	360	410	560	540	530
Strontium	mg/L														
Sulfate	mg/L	530	570			620		490		690	670	670	3.1 J	2.8 J	3 J
Temperature, Field	deg C	17		16.5	20.9		20.8		17		9	21.2	13	12	12
Thallium	mg/L		0.001 U					0.001 U		0.001		0.001 U			
Turbidity, Field	NTU	384		358.02	357.04		335.09		325.46		355.82	265.18	19.8	0.6	0.6
Vanadium	mg/L														
Zinc	mg/L														

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

		Location	2019-02	2019-02	2019-02	2019-02	2019-02	2019-02	2019-06	2019-06	2019-06	2019-06	2019-06	2019-06	2019-06	2019-06
		Date	2021-09-25	2022-03-25	2022-03-25	2022-05-04	2022-07-13	2022-08-17	2020-09-15	2021-03-16	2021-09-25	2022-05-04	2022-09-16	2023-09-20	2023-09-20	2024-02-22
		Sample Type	N	FD	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Unit															
Alkalinity, Total as CaCO3	mg/L		1600	1400	1400	1500	1400	1500	220	180	310		170			
Aluminum	mg/L			1.5	1.5											
Antimony	mg/L			0.002 U	0.00084 J	0.002 U	0.002 U	0.002 U								
Arsenic	mg/L			0.0052	0.0052	0.0056	0.009	0.0058								
Barium	mg/L			0.65	0.63	0.71	0.76	0.57								
Beryllium	mg/L			0.001 U	0.001 U	0.001 U	0.001 U	0.001 U								
Bicarbonate Alkalinity as CaCO3	mg/L		5 U	5 U	5 U	5 U	5 U	5 U	220	180	310		170			
Bicarbonate Alkalinity as HCO3	mg/L															
Boron	mg/L		0.1 U	0.2 U	0.2 U	0.1 U	0.1 U	0.1 U	0.23	0.28	0.25		0.24			
Bromide	mg/L															
Cadmium	mg/L			0.0001 U	0.0001 U	0.001 U	0.001 U	0.001 U								
Calcium	mg/L		230	260	260	230	240	290	27	72	160		230			
Carbonate Alkalinity as CaCO3	mg/L		54	69	69	64	26	16	5.6	5 U	5 U		5 U			
Chloride	mg/L		180	160	150	150	120	110	1900	3800	6500		9400 J		12000	
Chromium	mg/L			0.0035 J	0.0034 J	0.005 U	0.011	0.0061								
Cobalt	mg/L			0.00023 J	0.00023 J	0.001 U	0.00085 J	0.0003 J								
Conductivity, Field	uS/cm		7521	7782	7782	7142	6942	7416	7203	11882	18046	22032	25787	11617		28001
Copper	mg/L			0.0064 J	0.0063 J											
Dissolved Oxygen, Field	mg/L			2.92	2.92	2.94	6.03	6.76				4.81	6.94	7.34		7.91
Dissolved Solids, Total	mg/L		1800	1800	1800	1600	1300	1700	2900	7400	9400		3200		14000	
Fluoride	mg/L		0.71	0.6	0.63	0.62	0.59	0.43	1.5	1.3	0.83		0.9 J		0.56	
Iron	mg/L			0.1 U	0.1 U											
Lead	mg/L			0.0005 U	0.0005 U	0.001 U	0.0012	0.00065 J								
Lithium	mg/L			0.26	0.25	0.29	0.25	0.23								
Magnesium	mg/L		1 U	0.5 U	0.5 U	1 U	1 U	1 U	7.7	21	52		84			
Manganese	mg/L			0.01 U	0.01 U											
Mercury	mg/L			0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U					0.0002 U			
Molybdenum	mg/L			0.017	0.017	0.017	0.02	0.015								
Nickel	mg/L			0.0024 J	0.0023 J											
Oxidation-Reduction Potential, Field	mV			-123.5	-123.5	-157	-114.9	-96.3				62.9	95.4	85		169.2
pH, Field	pH units		12.26	12.23	12.23	12.14	12.42	12.58	8.46	7.95	7.68	7.46	7.06	8.01		7.43
Potassium	mg/L		16	14	13	12	13	13	3.8	7.2	15		17			
Radium-226	pCi/L			2.05	2.3	1.79	2.05	1.78				3.59	5.21			
Radium-226/228	pCi/L			2.94	3.36	1.93	3.64 J	2.54				4.53	15.7			
Radium-228	pCi/L			0.887	1.07	0.137 U	1.59 J	0.762				0.943	10.4			
Redox Potential, Field	mV															
Selenium	mg/L			0.005 U	0.005 U	0.005 U	0.0018 J	0.0013 J								
Silver	mg/L			0.001 U	0.00052 J											
Sodium	mg/L		550	500	490	420	400	410	1500	2300	3900		5200			
Strontium	mg/L			2.2	2.1											
Sulfate	mg/L		2.7 J	2.4	2.6	2.3	9.7	6.4	750	710	410		310 J		390	
Temperature, Field	deg C		13	12	12	12.7	15.6	14.5	14	13	14	13.7	22.3	18.9		13.6
Thallium	mg/L			0.001 U	0.001 U	0.001 U	0.001 U	0.0002 J								
Turbidity, Field	NTU		0.1	0.6	0.6	0.31	98.41	5.9	13.4	156	146	54.4	47.51	62.68		37.2
Vanadium	mg/L															
Zinc	mg/L			0.02 U	0.02 U											

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
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Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	2019-06	2019-06	2019-06	2019-06	2019-06	2019-06	2019-06	2019-07	2019-07	2019-07	2019-07	2019-07	2019-07	2019-07
	Date	2024-02-22	2025-02-26	2025-04-22	2025-04-22	2025-08-20	2025-08-20	2025-09-23	2021-09-25	2022-03-24	2022-05-04	2022-07-20	2022-08-18	2022-09-15	2022-11-01
	Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L	110	210					380	160	190	200	220	230	210	
Aluminum	mg/L									0.61					
Antimony	mg/L	0.00069 J	0.0015 J		0.00085 J		0.0011 J	0.0014 J		0.002 U	0.002 U	0.002 U	0.00058 J		
Arsenic	mg/L	0.0026 J	0.0028 J		0.0037 J		0.007	0.0063		0.0032 J	0.003 J	0.0032 J	0.0023 J		
Barium	mg/L	0.56	0.2		0.14		0.46	0.31		0.43	0.37	0.55	0.65		
Beryllium	mg/L	0.001 U	0.001 U		0.001 U		0.00097 J	0.00089 J		0.004 U	0.001 U	0.001 U	0.001 U		
Bicarbonate Alkalinity as CaCO3	mg/L	110	210					380	160	190	200	220	230	210	
Bicarbonate Alkalinity as HCO3	mg/L														
Boron	mg/L	0.28	0.23	0.3		0.22		0.25 J	0.42	1.1 J	0.47	0.52	0.51	0.55	
Bromide	mg/L														
Cadmium	mg/L	0.001 U	0.001 U		0.001 U		0.00012 J	0.00022 J		0.0004 U	0.001 U	0.001 U	0.00033 J		
Calcium	mg/L	310	100	75	43	87	150	84	740	1000	730	880	840	780	
Carbonate Alkalinity as CaCO3	mg/L	5 U	5 U					5 U	5 U	5 U	5 U	5 U	5 U	5 U	
Chloride	mg/L	11000	3400	3000				4700	16000	16000	17000	17000	19000	18000	18000
Chromium	mg/L	0.016	0.014		0.018		0.055	0.039		0.02 U	0.005 U	0.011	0.017		
Cobalt	mg/L	0.0028	0.0024		0.0026		0.0092	0.0073		0.0045	0.0067	0.0044	0.0039		
Conductivity, Field	uS/cm		11335						36854	44987	41930	45882	46294	45379	40082
Copper	mg/L									0.02 U					
Dissolved Oxygen, Field	mg/L		1.8							1.67	3.43	1.22	1.68	6.58	7.64
Dissolved Solids, Total	mg/L		3900	5300		8000		7700	2900	26000	27000	21000		8200	
Fluoride	mg/L	0.48 J	1.2	1.5				1.3	2.5 U	5 U	5 U	50 U	1 U	2.5 U	2.5 U
Iron	mg/L									2.1					
Lead	mg/L	0.0015	0.0013		0.0029		0.0092	0.0079		0.002 U	0.001 U	0.00096 J	0.0018 J		
Lithium	mg/L	0.22	0.14		0.1		0.29	0.32		0.27	0.24	0.29	0.32		
Magnesium	mg/L	98	30	22	12	29	49	35	200	250	220	250	280	250	
Manganese	mg/L									1.6					
Mercury	mg/L	0.0002 U	0.0002 U		0.0002 U		0.0002 U	0.0002 U		0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	
Molybdenum	mg/L	0.034	0.036		0.034		0.038	0.038		0.0098	0.0086	0.0094	0.012		
Nickel	mg/L									0.0088 J					
Oxidation-Reduction Potential, Field	mV		115.8							-65	-30.9	-42.4	66	81.2	121.5
pH, Field	pH units		8						6.93	6.98	6.75	6.8	6.82	7.09	6.67
Potassium	mg/L	17	6.6	5.4	4.9	8.1	12	11	21	25	19	23	24	40	
Radium-226	pCi/L		0.915 U		0.913		2.01	0.562 U		1.02	0.806	1.19	1.35	13	
Radium-226/228	pCi/L		3.58		3.07		7.27	4.11 J		1.87	0.98	2.77	2.72 J	33	
Radium-228	pCi/L		2.66		2.16 G		5.27 G	3.54		0.847	0.174 U	1.58 U	1.37	19.9	
Redox Potential, Field	mV														
Selenium	mg/L	0.0012 J	0.005 U		0.005 U		0.005 U	0.0016 J		0.0049 J	0.0012 J	0.005 U	0.0027 J		
Silver	mg/L									0.004 U					
Sodium	mg/L	5900	2200	1900	1600	2700	3400	2900	8700	10000	9900	9200	9600	8900	
Strontium	mg/L									62					
Sulfate	mg/L	390	360	300				230	530	510	530	510	480	490	450
Temperature, Field	deg C		13.6						14	15	13.4	15.1	15.9	25.6	19.3
Thallium	mg/L	0.001 U	0.001 U		0.001 U		0.001 U	0.00085 J		0.004 U	0.001 U	0.001 U	0.0012 U		
Turbidity, Field	NTU		58.23						316	62.3	9.1	88.34	85.15	19.75	33.74
Vanadium	mg/L														
Zinc	mg/L									0.08 U					

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	2019-07	2019-07	2019-07	2019-07	2019-07	2019-07	2019-07	2019-07	2019-07	2019-07	2019-07	2019-07	2019-09	2019-09
	Date	2022-12-12	2023-02-28	2023-04-03	2023-04-13	2023-09-19	2023-09-19	2024-03-11	2024-03-11	2024-09-18	2024-09-18	2025-04-08	2025-09-22	2021-09-25	2022-03-24
	Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L	220	220	250	240		230		220		220	230	210	170	270
Aluminum	mg/L														26
Antimony	mg/L	0.001 J	0.002 U	0.002 U	0.0022		0.002 U		0.00074 J		0.002	0.00059 J	0.002 U		0.002 U
Arsenic	mg/L	0.0031 J	0.0023 J	0.0025 J	0.016		0.0015 J		0.005 U		0.0015	0.0019 J	0.00085 J		0.014
Barium	mg/L	0.57	0.57	0.54	1.3		0.58		0.55		0.61	0.66	0.65		27
Beryllium	mg/L	0.001 U	0.001 U	0.001 U	0.0024		0.001 U		0.001 U		0.001	0.001 U	0.001 U		0.003 J
Bicarbonate Alkalinity as CaCO3	mg/L	220	220	250	240		230		220		220	230	210	170	270
Bicarbonate Alkalinity as HCO3	mg/L														
Boron	mg/L	0.51	0.59	0.56	0.59		0.51		0.55		0.53	0.55	0.55 J	0.29	1 J
Bromide	mg/L														
Cadmium	mg/L	0.0003 J	0.001 U	0.00023 J	0.00054 J		0.001 U		0.001 U		0.00016	0.00011 J	0.001 U		0.00022 J
Calcium	mg/L			880			960		910		1200	1200	970	690	1200
Carbonate Alkalinity as CaCO3	mg/L	5 U	5 U	5 U	5 U		5 U		5 U		5	5 U	5 U	5 U	5 U
Chloride	mg/L	18000	19000	18000	18000		23000		20000		23000	23000	20000	16000	18000
Chromium	mg/L	0.02	0.016	0.0097	0.18		0.029		0.0026 J		0.099	0.031	0.033		0.19
Cobalt	mg/L	0.0057	0.0037	0.0039	0.019		0.0069		0.008		0.015	0.01	0.01		0.016
Conductivity, Field	uS/cm	45169	55485	44681		32549		50062		48788		47936	50799	39000	44025
Copper	mg/L														0.02 U
Dissolved Oxygen, Field	mg/L	3.53	2.29	1.74		1.9		2.31		1.78		2.56	1.96		0.46
Dissolved Solids, Total	mg/L			27000			27000		25000		31000	23000	32000	5500	24000
Fluoride	mg/L	1 U	2.5 U	2.5 U	2.5 U		5 U		5 U		5	5 U	2.5 U	2.5 U	5 U
Iron	mg/L														140
Lead	mg/L	0.0016	0.0011	0.00053 J	0.018		0.0016		0.001 U		0.00055	0.0012	0.001 U		0.045
Lithium	mg/L	0.3	0.35	0.3	0.35		0.34		0.3		0.28	0.33	0.3		0.3
Magnesium	mg/L	280	280	260	260		280		280		270	280	270	220	310
Manganese	mg/L														3.5
Mercury	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U		0.0002 U		0.0002 U		0.0002	0.0002 U	0.0002 U		0.0002 U
Molybdenum	mg/L	0.011	0.0084	0.0084	0.017		0.0082		0.0053		0.015	0.017	0.0074 J		0.0074 J
Nickel	mg/L														0.069
Oxidation-Reduction Potential, Field	mV	58.6	210.9	50.3		101.3		130.4		73.1		156	53.8		-173.5
pH, Field	pH units	6.82	6.66	6.82		6.76		6.68		6.58		6.84	6.72	7.32	7.18
Potassium	mg/L	22	22	21	26		22		21		22	23	20	26	38
Radium-226	pCi/L		0.733	1.08	0.699 U		0.789		0.742 J		0.638	0.533 U	1.04 J		36.3
Radium-226/228	pCi/L		1.66	1.94 J	2.28 U		1.44 J		2.04 J		1.9	3.03	3.52 J		102
Radium-228	pCi/L		0.923	0.857 J	1.58 U		0.648 U		1.3 J		1.26	2.49	2.47 J		65.9
Redox Potential, Field	mV														
Selenium	mg/L	0.005 U	0.0036 J	0.001 J	0.0016 J		0.0023 J		0.0014 J		0.005	0.005 U	0.005 U		0.0077 J
Silver	mg/L														0.004 U
Sodium	mg/L	9800	10000	9000	9100		9700		10000		11000	10000	9600	7600	8900
Strontium	mg/L														64
Sulfate	mg/L	470	450	430	410		570		320		380	300	270	50 U	100 U
Temperature, Field	deg C	10.9	12.6	15.1		15.6		12.9		18.1		10.3	19.8	13	13
Thallium	mg/L	0.00038 J	0.001 U	0.00038 J	0.00082 J		0.001 U		0.00033 J		0.001	0.001 U	0.001 U		0.004 U
Turbidity, Field	NTU	1091.9	100.14	48.22		273.8		23.81		32.34		75.11	38.07	556	1270.5
Vanadium	mg/L														
Zinc	mg/L														0.12

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

		Location	2019-09	2019-09	2019-09	2019-09	2019-09	2019-09	2019-09	2019-09	2019-09	2019-09	2019-09	2019-09	2019-09	2019-09
		Date	2022-08-18	2022-09-16	2022-12-13	2022-12-13	2023-04-03	2023-04-13	2023-06-16	2023-06-16	2023-08-15	2023-08-15	2023-09-21	2023-09-21	2023-12-14	2023-12-14
		Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Unit															
Alkalinity, Total as CaCO3	mg/L	210	180	180	170	190	190		180		190		190		170 B	
Aluminum	mg/L															
Antimony	mg/L	0.0017 J		0.0017 J		0.0014 J	0.0014 J		0.0014 J		0.0019 J		0.002 U			
Arsenic	mg/L	0.037 J		0.026		0.025	0.033		0.015		0.0074		0.0028 J			
Barium	mg/L	25		24		32	31		29		31		28			
Beryllium	mg/L	0.0089		0.0045		0.0035	0.006		0.0022		0.001		0.001 U			
Bicarbonate Alkalinity as CaCO3	mg/L	210	180	180	170	190	190		180		190		190		170 B	
Bicarbonate Alkalinity as HCO3	mg/L															
Boron	mg/L	0.36	0.3		0.34	0.43	0.44		0.47		0.41		0.39		0.41	
Bromide	mg/L															
Cadmium	mg/L	0.00041 J		0.00085 J		0.00059 J	0.00041 J		0.00022 J		0.00023 J		0.001 U			
Calcium	mg/L	800	620		830	880					860		890		900	
Carbonate Alkalinity as CaCO3	mg/L	5 U	5 U	5 U	5 U	5 U	5 U		5 U		5 U		5 U		5 U	
Chloride	mg/L	18000	18000 J		19000	19000	19000		20000		18000		23000		19000	
Chromium	mg/L	0.42		0.34		0.16	0.37		0.15		0.065		0.026			
Cobalt	mg/L	0.069		0.061		0.04	0.069		0.034		0.012		0.0049			
Conductivity, Field	uS/cm	46681	40991	42856		39223		18069		32455		24781		49621		
Copper	mg/L															
Dissolved Oxygen, Field	mg/L	0.69	6.2	7.45		1.6		7.58		4.39		7.57		4.44		
Dissolved Solids, Total	mg/L		17000		28000 H	28000			29000		28000		26000		25000	
Fluoride	mg/L	1 U	1 J	1 U	1 U	2.5 U	2.5 U		5 U		2.5 U		1.3 U		1 U	
Iron	mg/L															
Lead	mg/L	0.072		0.049		0.019	0.062		0.024		0.0076 J		0.0034			
Lithium	mg/L	0.51 J		0.36		0.37	0.45		0.35		0.32		0.27			
Magnesium	mg/L	310	280	280	300	310	320		310		290		280		300	
Manganese	mg/L															
Mercury	mg/L	0.00021	0.00054 J	0.00031 B		0.0002 U	0.0002 U		0.0002 U		0.0002 U		0.0002 U			
Molybdenum	mg/L	0.061		0.048		0.037	0.054		0.024		0.043		0.012			
Nickel	mg/L															
Oxidation-Reduction Potential, Field	mV	-145.1	135.4	69.9		-112.6		230		17.9		191.2		-92.9		
pH, Field	pH units	7.01	6.42	6.48		6.94		6.53		6.95		6.32		6.81		
Potassium	mg/L	44	82	35	34	33	40		34 J		28		26		26	
Radium-226	pCi/L	39.8		43.2		46.1	37.1		36.7		34.8 J		34.7			
Radium-226/228	pCi/L	111		109		116	105		99.8		104 J		90.4			
Radium-228	pCi/L	70.8		65.9 G		70.2	67.9		63.1		69 J		55.7			
Redox Potential, Field	mV															
Selenium	mg/L	0.0091 J		0.0018 J		0.002 J	0.0017 J		0.0012 J		0.0016 J		0.005 U			
Silver	mg/L															
Sodium	mg/L	8600	5500	7600	8400	8700	9200		9300		9800		9100		9400	
Strontium	mg/L															
Sulfate	mg/L	20 U	2.1		20 U	50 U	50 U		8.6 J		50 U		150		20 U	
Temperature, Field	deg C	16.3	17.2	8.1		13		16.2		15.3		15.9		7.9		
Thallium	mg/L	0.001 U		0.0012		0.0015	0.00068 J		0.001 U		0.00062 J		0.001 U			
Turbidity, Field	NTU	1752.32	1024.97	1216.19		738.15		572.36		572.17		319.92		314.83		
Vanadium	mg/L															
Zinc	mg/L															

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	2019-09	2019-09	2019-09	2019-09	2019-09	2019-09	2019-09	2022-02	2022-02	2022-02	2022-02	2022-02	2022-02	2022-02
	Date	2023-12-14	2024-03-12	2024-03-12	2024-09-17	2024-09-17	2025-04-08	2025-09-22	2024-06-27	2024-06-27	2024-06-27	2024-09-12	2024-09-12	2025-03-28	2025-04-22
	Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L	170 B		190		170	170	170		270	270		280	310	310
Aluminum	mg/L														
Antimony	mg/L	0.00063 J		0.002 U		0.002	0.002 U	0.002 U			0.00095 J		0.0016 J	0.0018 J	0.0015 J
Arsenic	mg/L	0.0059		0.0058		0.0031	0.0038 J	0.0026 J			0.0026 J		0.0054 J	0.0028 J	0.0024 J
Barium	mg/L	29		27		34	31	33			0.45		0.67	0.6	0.67
Beryllium	mg/L	0.001 U		0.001 U		0.001	0.001 U	0.001 U			0.001 U		0.0019	0.005 U	0.00048 J
Bicarbonate Alkalinity as CaCO3	mg/L	170 B		190		170	170	170		270	270		280	310	310
Bicarbonate Alkalinity as HCO3	mg/L														
Boron	mg/L			0.39		0.42	0.42	0.46 J		0.37			0.41	0.45	0.48
Bromide	mg/L														
Cadmium	mg/L	0.001 U		0.001 U		0.001	0.001 U	0.001 U			0.001 U		0.00015 J	0.001 U	0.00012 J
Calcium	mg/L	910		850		1200	1200	970		18	18		22	31	29
Carbonate Alkalinity as CaCO3	mg/L	5 U		5 U		5	5 U	5 U		5 U	5 U		5 U	5 U	5 U
Chloride	mg/L			19000		22000	22000	20000		2000			2100	2200	2100
Chromium	mg/L	0.048		0.049		0.017	0.015	0.031			0.005 U		0.022	2.1	0.66
Cobalt	mg/L	0.0081		0.0066		0.0031	0.0041	0.0024			0.001 U		0.0049	0.044	0.016
Conductivity, Field	uS/cm		47092		48373		47481	48559	6813			7134		7276	
Copper	mg/L														
Dissolved Oxygen, Field	mg/L		3.32		1.13		3.68	1.73	0.91			8.96		3.88	
Dissolved Solids, Total	mg/L			24000		29000 J	26000	27000		3500			2900	3900	3800
Fluoride	mg/L	0.5 U		1 U		5	5 U	2.5 U		2.2	2.2		2.3	1.8	1.6
Iron	mg/L														
Lead	mg/L	0.0055		0.0052		0.0019	0.0024	0.00055 J			0.001 U		0.01	0.0013	0.0031
Lithium	mg/L	0.26		0.27		0.27	0.29	0.29			0.044 J		0.052	0.046 J	0.045
Magnesium	mg/L	300		260		300	290	300		5.7	5.8		10	8.2	9
Manganese	mg/L														
Mercury	mg/L	0.00014 J		0.0002 U		0.0002	0.0002 U	0.0002 U			0.0002 U		0.0002 U	0.0002 U	0.0002 U
Molybdenum	mg/L	0.033		0.039		0.026	0.023	0.017			0.095		0.11	0.4	0.17
Nickel	mg/L														
Oxidation-Reduction Potential, Field	mV		-120.9		-116.1		-11.7	-91.1	24.3			86.5		141	
pH, Field	pH units		7.02		6.87		6.98	6.82	8.1			8.16		7	
Potassium	mg/L	27		24		26	25	24		3.9	3.5		7.2	4.8	5.4
Radium-226	pCi/L	39.4		29.3		37.8	28.1 J	36.2 J			0.463			1.36	
Radium-226/228	pCi/L	123		78		124	116 J	129 J			0.859			3.33	
Radium-228	pCi/L	83.7 G		48.7		86.6 G	88.2 J	92.3 J			0.396 U			1.97	
Redox Potential, Field	mV														
Selenium	mg/L	0.005 U		0.0023 J		0.005	0.005 U	0.005 U			0.005 U		0.0029 J	0.005 U	0.0018 J
Silver	mg/L														
Sodium	mg/L	9700		8800		11000	10000	10000		1400	1300		1500	1600	1500
Strontium	mg/L														
Sulfate	mg/L			100 U		100	100 U	50 U		130			140	88	88
Temperature, Field	deg C		10.9		17		12.3	21	20			18.2		14.9	
Thallium	mg/L	0.001 U		0.001 U		0.001	0.001 U	0.001 U			0.001 U		0.001 U	0.001 U	0.001 U
Turbidity, Field	NTU		182.32		118.22		62.4	20.74	6.23			215.49		81.61	
Vanadium	mg/L														
Zinc	mg/L														

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
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B: Compound was found in the blank and sample.
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Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

		Location	2022-02	2022-02	2022-02	2022-03	2022-03	2022-03	2022-03	2022-03	2022-03	2022-03	2022-03	2022-03	2022-03	2022-03
		Date	2025-08-19	2025-09-16	2025-11-04	2023-09-20	2023-09-20	2024-03-12	2024-03-12	2024-04-12	2024-04-12	2024-04-12	2024-06-28	2024-06-28	2024-06-28	2024-09-04
		Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Unit															
Alkalinity, Total as CaCO3	mg/L	290	300	330		230		270		240	240		100	150		
Aluminum	mg/L															
Antimony	mg/L	0.0012 J	0.0011 J	0.0016 J		0.00068 J		0.00071 J			0.002 U			0.002 U		
Arsenic	mg/L	0.0016 J	0.0018 J	0.0033 J		0.0041 J		0.0028 J			0.0021 J			0.0014 J		
Barium	mg/L	0.57	0.64	0.58		0.32		0.3			0.35			0.75		
Beryllium	mg/L	0.001 U	0.001 U	0.001 U		0.001 U		0.001 U			0.001 U			0.001 U		
Bicarbonate Alkalinity as CaCO3	mg/L	290	300	330		230		270		240	240		100	150		
Bicarbonate Alkalinity as HCO3	mg/L															
Boron	mg/L	0.45	0.5 J	0.47		0.35		0.44		0.38			0.28			
Bromide	mg/L															
Cadmium	mg/L	0.001 U	0.001 U	0.001 U		0.001 U		0.001 U			0.001 U			0.001 U		
Calcium	mg/L	27	30	31		270		280		370	380		380	410		
Carbonate Alkalinity as CaCO3	mg/L	5 U	5 U	5 U		5 U		5 U		5 U	5 U		5 U	5 U		
Chloride	mg/L	2300	2300	2400		14000		13000		14000			17000			
Chromium	mg/L	0.96	0.32	0.45		0.005 U		0.0013 J			0.005 U			0.005 U		
Cobalt	mg/L	0.014	0.0086	0.013 B		0.0019		0.0023			0.0017			0.0015		
Conductivity, Field	uS/cm		7274		29657		35061		36554			43404			43014	
Copper	mg/L															
Dissolved Oxygen, Field	mg/L		2.58		1.02		1.34		0.14			0.39			0.9	
Dissolved Solids, Total	mg/L	3800	3900	4200		18000		16000		22000			22000			
Fluoride	mg/L	1.8	1.7	1.6		1.1		0.68 J		2.5 U	2.5 U		1.3 U	2.5 U		
Iron	mg/L															
Lead	mg/L	0.00087 J	0.0013	0.0021		0.0014		0.0007 J			0.001 U			0.001 U		
Lithium	mg/L	0.044	0.05	0.054		0.75		0.63			0.55			0.72		
Magnesium	mg/L	7.4	8.4	9.4		100		100		140	130		140	150		
Manganese	mg/L															
Mercury	mg/L	0.0002 U	0.0002 U	0.0002 U		0.0002 U		0.0002 U			0.0002 U			0.0002 U		
Molybdenum	mg/L	0.16	0.097	0.13		0.2		0.2			0.14			0.18		
Nickel	mg/L															
Oxidation-Reduction Potential, Field	mV		-28.1		64.9		-132.4		15.4			-101.6			-59.7	
pH, Field	pH units		7.76		7.21		7.28		7.12			7.31			7.26	
Potassium	mg/L	4	4.5	5.2		26		24		20	20		24	23		
Radium-226	pCi/L	1.6	1.3 J	2.89 G		1.35		1.18			1.41			1.52		
Radium-226/228	pCi/L	4.76	3.17 J	11		4.26		2.89 J			3.2			4.46		
Radium-228	pCi/L	3.15 G	1.87 J	8.07 G		2.91		1.71 J			1.79			2.94		
Redox Potential, Field	mV															
Selenium	mg/L	0.005 U	0.005 U	0.005 U		0.016		0.014			0.0045 J			0.0011 J		
Silver	mg/L															
Sodium	mg/L	1500	1700	1900		7800		7200		7300	7600		9300	7500		
Strontium	mg/L															
Sulfate	mg/L	77	69	81		1000		690		410			25 U			
Temperature, Field	deg C		19.5		15.6		14.2		13			22.5			19.2	
Thallium	mg/L	0.001 U	0.001 U	0.001 U		0.001 U		0.001 U			0.0002 J			0.01 U		
Turbidity, Field	NTU		22.77		19.08		9.28		7.74			9.07			7.33	
Vanadium	mg/L															
Zinc	mg/L															

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	2022-03	2022-03	2022-03	2022-03	2022-03	2022-03	2022-03	2022-03	2022-03	2022-03	2022-03	2022-03	2022-04	2022-04
	Date	2024-09-04	2024-09-04	2024-09-27	2024-09-27	2024-10-17	2024-10-17	2024-10-17	2024-12-02	2024-12-02	2024-12-02	2025-03-04	2025-09-16	2023-09-15	2023-09-15
	Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L	200	220		180		210	220		150	300	180	350		500
Aluminum	mg/L														
Antimony	mg/L		0.002 U		0.002			0.002 U			0.001 J	0.001 J	0.002 U		0.002 U
Arsenic	mg/L		0.0019 J		0.0013			0.0013 J			0.0016 J	0.0022 J	0.0022 J		0.0021 J
Barium	mg/L		0.64		0.78			0.79			0.84	1.6	0.91		0.13
Beryllium	mg/L		0.001 U		0.001			0.001 U			0.001 U	0.001 U	0.001 U		0.001 U
Bicarbonate Alkalinity as CaCO3	mg/L	200	220		180		210	220		150	300	180	350		500
Bicarbonate Alkalinity as HCO3	mg/L														
Boron	mg/L	0.31			0.37		0.33			0.29		0.27	0.43 J		0.68
Bromide	mg/L														
Cadmium	mg/L		0.001 U		0.00045			0.00013 J			0.00022 J	0.00016 J	0.001 U		0.001 U
Calcium	mg/L	400	350		350		370	370		410	360	400	330		100
Carbonate Alkalinity as CaCO3	mg/L	5 U	5 U		5		5	5 U		5 U	5 U	5 U	5 U		5 U
Chloride	mg/L	18000			17000		19000			16000		17000	14000		34
Chromium	mg/L		0.0013 J		0.005			0.0013 J			0.0035 J	0.0074	0.0017 J		0.0065
Cobalt	mg/L		0.0019		0.0016			0.0016			0.0013	0.0017	0.0018		0.0018
Conductivity, Field	uS/cm			41932		42940			47790			43001	34463	1126	
Copper	mg/L														
Dissolved Oxygen, Field	mg/L			0.41		0.84			0.57			1.36	0.15	1.54	
Dissolved Solids, Total	mg/L	23000			23000		15000			250000 HE		23000	17000		620
Fluoride	mg/L	0.72	0.66		5		5	5 U		5 U	5 U	5 U	5 U		0.14
Iron	mg/L														
Lead	mg/L		0.0018		0.00062			0.001 U			0.001 U	0.0012	0.001 U		0.0016
Lithium	mg/L		0.6		0.64			0.64			0.63 F1	0.67	0.6		0.026
Magnesium	mg/L	140	130		150		140	140		160	140	150	110		31
Manganese	mg/L														
Mercury	mg/L		0.0002 U		0.0002			0.0002 U			0.0002 U	0.0002 U	0.0002 U		0.0002 U
Molybdenum	mg/L		0.18		0.18			0.17			0.18 F1	0.17	0.15		0.0034 J
Nickel	mg/L														
Oxidation-Reduction Potential, Field	mV			-0.8		-9			163.8			46	-97.8	-21.5	
pH, Field	pH units			7.26		7.26			7.37			7.38	7.13	7.15	
Potassium	mg/L	22	22		24		25	24		27	24	25	22		4.4
Radium-226	pCi/L		1.67		1.54			0.969			2.09	2.07	1.93 J		0.22 U
Radium-226/228	pCi/L		4.32		4.71			4.59			6.47	7.24	7.22 J		1.59 J
Radium-228	pCi/L		2.65		3.18			3.62			4.38	5.17	5.29 J		1.37 J
Redox Potential, Field	mV														
Selenium	mg/L		0.0051		0.0029			0.0025 J			0.0024 J	0.0014 J	0.0013 J		0.005 U
Silver	mg/L														
Sodium	mg/L	8800	7900		9300		8800	8800		9500	8500	9500	7700		96
Strontium	mg/L														
Sulfate	mg/L	330			250		280			150		190	440		100
Temperature, Field	deg C			17.4		15.2			11.8			12.8	16.5	16	
Thallium	mg/L		0.001 U		0.001			0.001 U			0.001 U	0.00053 J	0.001 U		0.001 U
Turbidity, Field	NTU			9.17		18.04			7.98			18.02	7.53	120.05	
Vanadium	mg/L														
Zinc	mg/L														

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	2022-04	2022-04	2022-04	2022-04	2022-04	2022-04	2022-04	2022-04	2022-04	2022-04	2022-04	2022-04	2022-04	2022-04
	Date	2024-03-06	2024-03-06	2024-04-11	2024-04-11	2024-04-11	2024-07-01	2024-07-01	2024-07-01	2024-07-01	2024-07-01	2024-09-03	2024-09-03	2024-09-03	2024-09-12
	Sample Type	N	N	N	N	N	FD	FD	N	N	N	N	N	N	FD
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L		500		500	510	490	490		490	490		500	500	510
Aluminum	mg/L														
Antimony	mg/L		0.002 U			0.002 U		0.0008 J			0.00057 J			0.002 U	0.002
Arsenic	mg/L		0.0013 J			0.0011 J		0.0018 J			0.0011 J			0.0011 J	0.005
Barium	mg/L		0.1			0.1		0.087			0.09			0.092	0.093
Beryllium	mg/L		0.001 U			0.001 U		0.001 U			0.001 U			0.00029 J	0.001
Bicarbonate Alkalinity as CaCO3	mg/L		500		500	510	490	490		490	490		500	500	510
Bicarbonate Alkalinity as HCO3	mg/L														
Boron	mg/L		0.74		0.74		0.68			0.65			0.79		0.79
Bromide	mg/L														
Cadmium	mg/L		0.001 U			0.001 U		0.001 U			0.001 U			0.001 U	0.001
Calcium	mg/L		110		110	120	97	100		93	100		110	120	120
Carbonate Alkalinity as CaCO3	mg/L		5 U		5 U	5 U	5 U	5 U		5 U	5 U		5 U	5 U	5
Chloride	mg/L		34		33		30			30			36		35
Chromium	mg/L		0.0024 J			0.0018 J		0.005 U			0.005 U			0.005 U	0.005
Cobalt	mg/L		0.00087 J			0.00058 J		0.00035 J			0.00034 J			0.00035 J	0.00026
Conductivity, Field	uS/cm	1225		1180					1134			1161			
Copper	mg/L														
Dissolved Oxygen, Field	mg/L	1.95		0.21					0.43			0.52			
Dissolved Solids, Total	mg/L		620		610		620			600			600		670
Fluoride	mg/L		0.11		0.1	0.12	0.11	0.11		0.11	0.11		0.1	0.096	0.081
Iron	mg/L														
Lead	mg/L		0.00073 J			0.00058 J		0.001 U			0.001 U			0.001 U	0.001
Lithium	mg/L		0.021			0.024		0.024			0.024			0.02	0.023
Magnesium	mg/L		32		31	36	30	31		29	31		35	35	38
Manganese	mg/L														
Mercury	mg/L		0.0002 U			0.0002 U		0.0002 U			0.0002 U			0.0002 U	0.0002
Molybdenum	mg/L		0.0013 J			0.0012 J		0.0012 J			0.0012 J			0.0013 J	0.005
Nickel	mg/L														
Oxidation-Reduction Potential, Field	mV	-92.9		-57.1					-73.1			-61.1			
pH, Field	pH units	7.25		6.88					6.8			6.96			
Potassium	mg/L		3.6		3.7	4	3.5	3.5		3.4	3.6		3.8	3.9	4.1
Radium-226	pCi/L		0.255 J			0.118 U		0.273			0.259			0.168	0.139 U
Radium-226/228	pCi/L		0.249 J			0.373 U		0.39 U			0.474 U			0.463 U	0.278 U
Radium-228	pCi/L		-0.00608 U			0.255 U		0.117 U			0.215 U			0.294 U	0.138 U
Redox Potential, Field	mV														
Selenium	mg/L		0.005 U			0.005 U		0.005 U			0.005 U			0.005 U	0.005
Silver	mg/L														
Sodium	mg/L		88		97	86	100	99		100	99		86	91	81
Strontium	mg/L														
Sulfate	mg/L		90		89		78			79			91		88
Temperature, Field	deg C	13.7		14.1					17.4			18			
Thallium	mg/L		0.001 U			0.00025 J		0.00039 J			0.001 U			0.001 U	0.001
Turbidity, Field	NTU	57.47		33.36					8.97			2.56			
Vanadium	mg/L														
Zinc	mg/L														

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	2022-04	2022-04	2022-04	2022-04	2022-04	2022-04	2022-04	2022-04	2022-04	2022-04	2022-05	2022-05	2022-05	2022-05
	Date	2024-09-12	2024-09-12	2024-10-16	2024-10-16	2024-10-16	2024-12-04	2024-12-04	2024-12-04	2025-02-28	2025-09-12	2023-09-15	2023-09-15	2024-03-06	2024-03-06
	Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L		510		480	490		480 H	480 H	490	470		330		320
Aluminum	mg/L														
Antimony	mg/L		0.002			0.002 U			0.002 U	0.00088 J	0.002 U		0.0012 J		0.002 U
Arsenic	mg/L		0.0013			0.00086 J			0.0017 J	0.0013 J	0.0013 J		0.0047 J		0.0057
Barium	mg/L		0.091			0.094			0.14	0.081	0.095		0.18		0.36
Beryllium	mg/L		0.00031			0.001 U			0.001 U	0.001 U	0.001 U		0.001 U		0.001 U
Bicarbonate Alkalinity as CaCO3	mg/L		510		480	490		480 H	480 H	490	470		330		320
Bicarbonate Alkalinity as HCO3	mg/L														
Boron	mg/L		0.79		0.72			0.78		0.73	0.83 J		0.31		0.36
Bromide	mg/L														
Cadmium	mg/L		8.6E-05			0.001 U			0.001 U	0.00013 J	0.001 U		0.001 U		0.001 U
Calcium	mg/L		120		110	110		120	120	110	130		14		14
Carbonate Alkalinity as CaCO3	mg/L		5		5 U	5 U		5 UH	5 UH	5 U	5 U		5 U		5 U
Chloride	mg/L		35		32			35		34	36		730		1100
Chromium	mg/L		0.005			0.005 U			0.0071	0.005 U	0.0033 J		0.0024 J		0.005 U
Cobalt	mg/L		0.0003			0.00034 J			0.0018	0.00048 J	0.00085 J		0.00043 J		0.00033 J
Conductivity, Field	uS/cm	1203		1246			1309			1145	1216	3186		4861	
Copper	mg/L														
Dissolved Oxygen, Field	mg/L	0.77		0.94			1.71			1.18	0.19	1.56		2.34	
Dissolved Solids, Total	mg/L		640		590			630		660	720		1500		2200
Fluoride	mg/L		0.087		0.11	0.11		0.14	0.14	0.12	0.11		2.1		2.6
Iron	mg/L														
Lead	mg/L		0.001			0.001 U			0.0015	0.001 U	0.00091 J		0.00049 J		0.001 U
Lithium	mg/L		0.023			0.025			0.024	0.025	0.027		0.026		0.025
Magnesium	mg/L		37		32	35		37	38	33	39		4.1		4.1
Manganese	mg/L														
Mercury	mg/L		0.0002			0.0002 U			0.0002 U	0.0002 U	0.0002 U		0.0002 U		0.0002 U
Molybdenum	mg/L		0.0016			0.0018 J			0.0024 J	0.0019 J	0.0014 J		0.063		0.077
Nickel	mg/L														
Oxidation-Reduction Potential, Field	mV	-22		-32.3			-31.2			24.5	18.1	-243.5		-199.3	
pH, Field	pH units	6.93		6.73			7.08			7.15	6.95	8.43		8.36	
Potassium	mg/L		4		4	4.1		4.9	5	4.2	4.6		2.7		2.1
Radium-226	pCi/L		0.147 U			0.305			0.349	0.144 U	0.51 J		0.359 U		0.469 J
Radium-226/228	pCi/L		0.309 U			0.842			0.52 U	0.858	1.87 J		2.09 J		1.21 J
Radium-228	pCi/L		0.162 U			0.537 U			0.171 U	0.714 U	1.36		1.73 J		0.745
Redox Potential, Field	mV														
Selenium	mg/L		0.0025			0.005 U			0.005 U	0.005 U	0.005 U		0.0013 J		0.005 U
Silver	mg/L														
Sodium	mg/L		79		100	95		92	91	110	91		640		940
Strontium	mg/L														
Sulfate	mg/L		88		83			92		100	130		180		170
Temperature, Field	deg C	19.3		13.6			12.1			12.9	17.1	15.7		13.6	
Thallium	mg/L		0.001			0.001 U			0.001 U	0.001 U	0.001 U		0.0002 J		0.001 U
Turbidity, Field	NTU	2.09		14.74			141.32			18.02	35.45	27.71		8.33	
Vanadium	mg/L														
Zinc	mg/L														

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	2022-05	2022-05	2022-05	2022-05	2022-05	2022-05	2022-05	2022-05	2022-05	2022-05	2022-05	2022-05	2022-05	2022-05
	Date	2024-04-11	2024-04-11	2024-04-11	2024-06-28	2024-06-28	2024-06-28	2024-09-03	2024-09-03	2024-09-03	2024-09-12	2024-09-12	2024-10-15	2024-10-15	2024-10-15
	Sample Type	N	N	N	N	N	N	N	N	N	N	N	FD	FD	N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L		290	290		290	270		190	200		200	210	240	
Aluminum	mg/L														
Antimony	mg/L			0.002 U			0.002 U			0.002 U		0.0019		0.002 U	
Arsenic	mg/L			0.0059			0.0053			0.0048 J		0.0057		0.0037 J	
Barium	mg/L			0.81			1.9			2.5		2.5		1.5	
Beryllium	mg/L			0.001 U			0.001 U			0.001 U		0.00045		0.001 U	
Bicarbonate Alkalinity as CaCO3	mg/L		290	290		290	270		190	200		200	210	240	
Bicarbonate Alkalinity as HCO3	mg/L														
Boron	mg/L		0.37			0.36			0.39			0.37	0.36		
Bromide	mg/L														
Cadmium	mg/L			0.001 U			0.001 U			0.001 U		0.0002		0.001 U	
Calcium	mg/L		36	29		34	61		88	89		75	92	58	
Carbonate Alkalinity as CaCO3	mg/L		5 U	5 U		5 U	5 U		5 U	5 U		5	5 U	5 U	
Chloride	mg/L		2400			2600			5100			4800	4800		
Chromium	mg/L			0.0014 J			0.005 U			0.005 U		0.005		0.005 U	
Cobalt	mg/L			0.00049 J			0.00065 J			0.00069 J		0.00068		0.00069 J	
Conductivity, Field	uS/cm	8251			14463			14603			15193				14687
Copper	mg/L														
Dissolved Oxygen, Field	mg/L	1.08			1.49			0.66			0.44				0.98
Dissolved Solids, Total	mg/L		3900			4600			3300			5300	7400		
Fluoride	mg/L		1.6	2		1.7	1.6		1.3	1.2		0.98	1.1	1.3	
Iron	mg/L														
Lead	mg/L			0.00051 J			0.001 U			0.001 U		0.001		0.001 U	
Lithium	mg/L			0.042			0.064			0.078		0.075		0.063	
Magnesium	mg/L		11	9.2		11	20		27	27		25	28	17	
Manganese	mg/L														
Mercury	mg/L			0.0002 U			0.0002 U			0.0002 U		0.0002		0.0002 U	
Molybdenum	mg/L			0.063			0.037			0.027		0.031		0.041	
Nickel	mg/L														
Oxidation-Reduction Potential, Field	mV	-201.8			-152.6			-191			-216.8				-185
pH, Field	pH units	8.04			7.6			7.7			7.77				7.76
Potassium	mg/L		3.5	3.2		3.6	5		6.1	6		5.7	6.4	4.9	
Radium-226	pCi/L			0.604			2.31			1.23		1.02		1.4	
Radium-226/228	pCi/L			1.93			4.59			2.81		2.3		3.09 J	
Radium-228	pCi/L			1.32			2.28			1.58		1.28		1.7 J	
Redox Potential, Field	mV														
Selenium	mg/L			0.001 J			0.005 U			0.005 U		0.0034		0.005 U	
Silver	mg/L														
Sodium	mg/L		1600	1500		1600	2300		2700	2900		3100	3200	2200	
Strontium	mg/L														
Sulfate	mg/L		110			100			36			36	56		
Temperature, Field	deg C	14.4			20.6			19.1			19.4				13.9
Thallium	mg/L			0.00058 J			0.001 U			0.001 U		0.00063		0.001 U	
Turbidity, Field	NTU	5.78			3.67			2.91			4.34				3.34
Vanadium	mg/L														
Zinc	mg/L														

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	2022-05	2022-05	2022-05	2022-05	2022-05	2022-05	2022-05	2022-05	2022-06	2022-06	2022-06	2022-06	2022-06	2022-06
	Date	2024-10-15	2024-10-15	2024-12-04	2024-12-04	2024-12-04	2025-02-27	2025-02-27	2025-09-12	2023-09-19	2023-09-19	2024-03-08	2024-03-08	2024-04-12	2024-04-12
	Sample Type	N	N	N	N	N	FD	N	N	N	N	N	N	N	N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L	200	230		200 H	200 H	260	260	190		500		510		520
Aluminum	mg/L														
Antimony	mg/L		0.002 U			0.002 U	0.002 U	0.00069 J	0.002 U		0.00068 J		0.002 U		
Arsenic	mg/L		0.0042 J			0.0038 J	0.0031 J	0.0041 J	0.0022 J		0.0018 J		0.0013 J		
Barium	mg/L		1.6			2.8	1.8 J	1.9 J	2.8		0.35		0.31		
Beryllium	mg/L		0.001 U			0.001 U	0.001 U	0.001 U	0.001 U		0.001 U		0.001 U		
Bicarbonate Alkalinity as CaCO3	mg/L	200	230		200 H	200 H	240	260	190		500		510		520
Bicarbonate Alkalinity as HCO3	mg/L														
Boron	mg/L	0.37			0.37		0.37	0.38	0.4 J		0.12		0.12		0.11
Bromide	mg/L														
Cadmium	mg/L		0.001 U			0.001 U	0.001 U	0.00013 J	0.001 U		0.001 U		0.001 U		
Calcium	mg/L	95	62		91	94	62	66	95		70		60		58
Carbonate Alkalinity as CaCO3	mg/L	5 U	5 U		5 UH	5 UH	19 J	5 UJ	5 U		5 U		5 U		5 U
Chloride	mg/L	4800			5200		3900	4400	5400		120		98		100
Chromium	mg/L		0.005 U			0.005 U	0.005 U	0.005 U	0.005 U		0.005		0.002 J		
Cobalt	mg/L		0.00069 J			0.00079 J	0.00069 J	0.00089 J	0.00076 J		0.0029		0.0017		
Conductivity, Field	uS/cm			17158				14773	15281	1169		1275		1281	
Copper	mg/L														
Dissolved Oxygen, Field	mg/L			1.43				0.61	0.18	1.87		1.81		0.43	
Dissolved Solids, Total	mg/L	7600			5700		7000	7100	8200		760		700		770
Fluoride	mg/L	1.1	1.3		1.2	1.2	1.2	1.2	1.3		0.7		0.87		0.83
Iron	mg/L														
Lead	mg/L		0.001 U			0.001 U	0.001 U	0.00045 J	0.001 U		0.0021		0.001 U		
Lithium	mg/L		0.065			0.089	0.07	0.077	0.09		0.015		0.012		
Magnesium	mg/L	28	18		30	32	21	22	29		15		13		12
Manganese	mg/L														
Mercury	mg/L		0.0002 U			0.0002 U	0.0002 U	0.0002 U	0.0002 U		0.0002 U		0.0002 U		
Molybdenum	mg/L		0.04			0.026	0.036	0.035	0.025		0.014		0.0082		
Nickel	mg/L														
Oxidation-Reduction Potential, Field	mV			-126.8				-177.1	-179.9	83.1		-132.9		-148.3	
pH, Field	pH units			7.77				7.73	7.53	7.08		7.17		7.37	
Potassium	mg/L	6.5	5.1		6.6	7	5.6	5.8	6.8		3.1		2.1		1.9
Radium-226	pCi/L		1.45			2.18	1.86	2.14	1.65 J		0.881		0.58 J		
Radium-226/228	pCi/L		2.96 J			3.93	4.18	3.92	4.42 J		1.64 J		0.937 J		
Radium-228	pCi/L		1.51 J			1.76	2.33	1.78	2.77		0.763 J		0.357 U		
Redox Potential, Field	mV														
Selenium	mg/L		0.005 U			0.005 U	0.005 U	0.005 U	0.005 U		0.005 U		0.005 U		
Silver	mg/L														
Sodium	mg/L	3000	2200		3200	3300	2600	2700	3600		210		210		200
Strontium	mg/L														
Sulfate	mg/L	53			33		64	63	31		55		27		24
Temperature, Field	deg C			11.5				13.6	16.7	15.8		14.6		12.8	
Thallium	mg/L		0.001 U			0.001 U	0.001 U	0.00058 J	0.001 U		0.001 U		0.001 U		
Turbidity, Field	NTU			9.39				4.05	5.11	54.2		19.13		17.65	
Vanadium	mg/L														
Zinc	mg/L														

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

		Location	2022-06	2022-06	2022-06	2022-06	2022-06	2022-06	2022-06	2022-06	2022-06	2022-06	2022-06	2022-06	2022-06	2022-06
		Date	2024-04-12	2024-07-03	2024-07-03	2024-07-03	2024-09-04	2024-09-04	2024-09-04	2024-09-13	2024-09-13	2024-10-18	2024-10-18	2024-10-18	2024-12-03	2024-12-03
		Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Unit															
Alkalinity, Total as CaCO3	mg/L	510		500	500		510	510		520		520	520		500
Aluminum	mg/L															
Antimony	mg/L	0.002 U			0.002 U			0.002 U		0.002			0.002 U		
Arsenic	mg/L	0.0014 J			0.0012 J			0.002 J		0.0027			0.0015 J		
Barium	mg/L	0.32			0.26			0.29		0.34			0.32		
Beryllium	mg/L	0.001 U			0.001 U			0.001 U		0.001			0.001 U		
Bicarbonate Alkalinity as CaCO3	mg/L	510		500	500		510	510		520		520	520		500
Bicarbonate Alkalinity as HCO3	mg/L														
Boron	mg/L			0.12			0.13			0.13		0.12			0.13
Bromide	mg/L														
Cadmium	mg/L	0.001 U			0.001 U			0.001 U		0.001			0.001 U		
Calcium	mg/L	61		59	62		61	59		62		61	61		61
Carbonate Alkalinity as CaCO3	mg/L	5 U		5 U	5 U		5 U	5 U		5		5 U	5 U		5 U
Chloride	mg/L			150			190			130		140			120
Chromium	mg/L	0.0016 J			0.0012 J			0.0022 J		0.0049			0.0019 J		
Cobalt	mg/L	0.0014			0.00093 J			0.0014		0.0019			0.0013		
Conductivity, Field	uS/cm		1197			1498			1420		1558			1368	
Copper	mg/L														
Dissolved Oxygen, Field	mg/L		2.73			2.29			0.6		0.79			0.75	
Dissolved Solids, Total	mg/L			790			820			770		710			780
Fluoride	mg/L	0.9		0.75	0.75		0.81	0.71		0.83		0.95	0.98		0.99
Iron	mg/L														
Lead	mg/L	0.00056 J			0.001 U			0.00089 J		0.0015			0.00049 J		
Lithium	mg/L	0.012			0.013			0.0086		0.016			0.014		
Magnesium	mg/L	13		13	13		13	13		13		13	13		12
Manganese	mg/L														
Mercury	mg/L	0.0002 U			0.0002 U			0.0002 U		0.0002					
Molybdenum	mg/L	0.0085			0.015			0.012		0.011			0.0097		
Nickel	mg/L														
Oxidation-Reduction Potential, Field	mV		-33.4			-113.3			-149.1		-133.9			-75.5	
pH, Field	pH units		7.13			7.42			7.1		7.07			7.25	
Potassium	mg/L	2.1		2.3	2.2		2.1	2.3		2.8		2.1 J	2.2 J		2
Radium-226	pCi/L	0.677			0.787			0.694		0.832			0.678		
Radium-226/228	pCi/L	1.25			1.31			1.69		2.04			1.99		
Radium-228	pCi/L	0.57 U			0.524 U			0.995 U		1.21 G			1.31		
Redox Potential, Field	mV														
Selenium	mg/L	0.005 U			0.005 U			0.005 U		0.005			0.005 U		
Silver	mg/L														
Sodium	mg/L	210		230	230		240	240		240		250	260		240
Strontium	mg/L														
Sulfate	mg/L			33			30			29		25			22
Temperature, Field	deg C		26.2			18.9			22.6		13.9			7.8	
Thallium	mg/L	0.001 U			0.001 U			0.001 U		0.001			0.001 U		
Turbidity, Field	NTU		77.04			42.61			76.35		29.96			32.21	
Vanadium	mg/L														
Zinc	mg/L														

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	2022-06	2022-06	2022-06	2022-12	2022-12	2022-12	2022-12	2022-12	2022-12	2022-12	2022-12	2022-12	2022-12	2022-12
	Date	2024-12-03	2025-03-07	2025-09-11	2023-09-21	2023-09-21	2024-03-15	2024-03-15	2024-04-15	2024-04-15	2024-04-15	2024-07-02	2024-07-02	2024-07-02	2024-08-30
	Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L	500	520	530		280		280		280	280		280	280	
Aluminum	mg/L														
Antimony	mg/L	0.002 U	0.002 U	0.002 U		0.002 U		0.002 U			0.002 U			0.0007 J	
Arsenic	mg/L	0.0013 J	0.0023 J	0.0019 J		0.005 U		0.005 U			0.005 U			0.005 U	
Barium	mg/L	0.32	0.33	0.34		0.019		0.017			0.015			0.014	
Beryllium	mg/L	0.001 U	0.001 U	0.001 U		0.001 U		0.001 U			0.001 U			0.001 U	
Bicarbonate Alkalinity as CaCO3	mg/L	500	520	530		280		280		280	280		280	280	
Bicarbonate Alkalinity as HCO3	mg/L														
Boron	mg/L		0.14	0.11 J		0.067 J		0.061 J		0.072 J			0.072 J		
Bromide	mg/L														
Cadmium	mg/L	0.001 U	0.001 U	0.001 U		0.001 U		0.001 U			0.001 U			0.001 U	
Calcium	mg/L	62	59	57		95		83		90	90		85	81	
Carbonate Alkalinity as CaCO3	mg/L	5 U	5 U	5 U		5 U		5 U		5 U	5 U		5 U	5 U	
Chloride	mg/L		130	75		23		20		19			18		
Chromium	mg/L	0.0015 J	0.003 J	0.005 U		0.005 U		0.005 U			0.005 U			0.005 U	
Cobalt	mg/L	0.00092 J	0.0023	0.0012 J		0.00032 J		0.00021 J			0.001 U			0.00026 J	
Conductivity, Field	uS/cm		1344	1238	1036		1079		1061			1030			1069
Copper	mg/L														
Dissolved Oxygen, Field	mg/L		3.43	0.11	1.48		2.18		2.08			1.29			1.14
Dissolved Solids, Total	mg/L		790	710		620		660		930			670		
Fluoride	mg/L	0.94	0.96	1		0.08		0.11		0.1	0.14		0.11	0.12	
Iron	mg/L														
Lead	mg/L	0.0005 J	0.00093 J	0.00046 J		0.001 U		0.001 U			0.001 U			0.001 U	
Lithium	mg/L	0.014	0.012	0.016		0.018 J		0.023			0.02			0.018	
Magnesium	mg/L	12	12	12		25		24		25	25		25	24	
Manganese	mg/L														
Mercury	mg/L	0.0002 U	0.0002 U	0.0002 U		0.0002 U		0.0002 U			0.0002 U			0.0002 U	
Molybdenum	mg/L	0.009	0.012	0.0079		0.0016 J		0.005 U			0.005 U			0.0011 J	
Nickel	mg/L														
Oxidation-Reduction Potential, Field	mV		-56.4	-140.2	95.5		-4		118.2			23.7			97.3
pH, Field	pH units		7.18	7.21	7.22		7.27		7.21			7.18			7.2
Potassium	mg/L	2.1	1.9	1.6		3		2.8		2.9	3		2.8	2.8	
Radium-226	pCi/L	0.773	0.558 U	0.812 J		0 U		0.298 U			0.142 U			0.111 U	
Radium-226/228	pCi/L	1.7	2	1.87 J		1.23 J		0.981			0.18 U			0.052 U	
Radium-228	pCi/L	0.927 U G	1.44	1.06 U		1.23 J		0.683 U			0.0381 U			-0.0591 U	
Redox Potential, Field	mV														
Selenium	mg/L	0.005 U	0.005 U	0.005 U		0.005 U		0.005 U			0.005 U			0.005 U	
Silver	mg/L														
Sodium	mg/L	240	240	250		110		110		110	110		110	100	
Strontium	mg/L														
Sulfate	mg/L		20	14		370		270		260			260		
Temperature, Field	deg C		12.7	18	15.1		13.9		14.8			17.3			18.3
Thallium	mg/L	0.001 U	0.001 U	0.001 U		0.001 U		0.00038 J			0.001 U			0.00024 J	
Turbidity, Field	NTU		49.03	20.06	70.04		36.57		10.26			9.34			9.91
Vanadium	mg/L														
Zinc	mg/L														

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	2022-12	2022-12	2022-12	2022-12	2022-12	2022-12	2022-12	2022-12	2022-12	2022-12	2022-12	2022-12	2022-12	2022-12
	Date	2024-08-30	2024-08-30	2024-09-26	2024-09-26	2024-10-16	2024-10-16	2024-10-16	2024-12-03	2024-12-03	2024-12-03	2024-12-03	2024-12-03	2024-12-03	2025-03-03	2025-09-17
	Sample Type	N	N	N	N	N	N	N	FD	FD	N	N	N	N	N	N
Analyte	Unit															
Alkalinity, Total as CaCO3	mg/L	280	280		290		270	270	270	270		270	280	280	260	
Aluminum	mg/L															
Antimony	mg/L		0.002 U		0.002			0.002 U		0.002 U			0.002 U	0.002 U	0.002 U	
Arsenic	mg/L		0.005 U		0.005			0.005 U		0.005 U			0.005 U	0.005 U	0.005 U	
Barium	mg/L		0.015		0.016			0.012		0.015			0.014	0.014	0.014 J	
Beryllium	mg/L		0.001 U		0.001			0.001 U		0.001 U			0.001 U	0.001 U	0.001 U	
Bicarbonate Alkalinity as CaCO3	mg/L	280	280		290		270	270	270	270		270	280	280	260	
Bicarbonate Alkalinity as HCO3	mg/L															
Boron	mg/L	0.087 J			0.077		0.088 J		0.087 J			0.081 J		0.076 J	0.1 U	
Bromide	mg/L															
Cadmium	mg/L		0.00021 J		0.001			0.001 U		0.001 U			0.001 U	0.001 U	0.00015 J	
Calcium	mg/L	83	85		84		89	86	80	82		80	82	77	83	
Carbonate Alkalinity as CaCO3	mg/L	5 U	5 U		5		5 U	5 U	5 U	5 U		5 U	5 U	5 U	5 U	
Chloride	mg/L	17			16		16		15			15		14	12	
Chromium	mg/L		0.005 U		0.0016			0.005 U		0.005 U			0.005 U	0.0012 J	0.005 U	
Cobalt	mg/L		0.00032 J		0.00035			0.001 U		0.00011 J			0.0001 J	0.00025 J	0.00023 J	
Conductivity, Field	uS/cm			1051		1098					999			909	901	
Copper	mg/L															
Dissolved Oxygen, Field	mg/L			2.06		1.49					2.01			1.56	0.95	
Dissolved Solids, Total	mg/L	560			680		600		630			610		590	560	
Fluoride	mg/L	0.1	0.099 J		0.12		0.12	0.13	0.14	0.14		0.14	0.14	0.13	0.13	
Iron	mg/L															
Lead	mg/L		0.001 U		0.001			0.001 U		0.001 U			0.001 U	0.001 U	0.001 U	
Lithium	mg/L		0.019		0.019			0.02		0.019			0.019	0.018	0.018	
Magnesium	mg/L	24	25		25		26	24	21	24		24	24	23	25	
Manganese	mg/L															
Mercury	mg/L		0.0002 U		0.0002			0.0002 U		0.0002 U			0.0002 U	0.0002 U	0.0002 U	
Molybdenum	mg/L		0.005 U		0.005			0.005 U		0.005 U			0.0023 J	0.005 U	0.005 U	
Nickel	mg/L															
Oxidation-Reduction Potential, Field	mV			62		72.3					120.7			72.3	63.4	
pH, Field	pH units			7.19		7.1					7.06			7.21	7.23	
Potassium	mg/L	3	3.1		3.2		3.4	3	3	3.1		3.2	3.1	3.1	3	
Radium-226	pCi/L		0.0915 U		0.46			0.0419 U		0.111 U			0.064 U	-0.0506 U	-0.0481 U	
Radium-226/228	pCi/L		0.123 U		1.14			0.262 U		-0.151 U			0.0865 U	0.0874 U	0.605 J	
Radium-228	pCi/L		0.0317 U		0.675 U			0.22 U		-0.262 U			0.0225 U	0.138 U	0.653	
Redox Potential, Field	mV															
Selenium	mg/L		0.005 U		0.005			0.005 U		0.005 U			0.005 U	0.005 U	0.0015 J	
Silver	mg/L															
Sodium	mg/L	110	110		110		110	110	110	110		110	110	110	110	
Strontium	mg/L															
Sulfate	mg/L	240			250		240		240			240		210	220	
Temperature, Field	deg C			16.4		13.7					11.3			13	14.4	
Thallium	mg/L		0.001 U		0.001			0.001 U		0.001 U			0.001 U	0.001 U	0.00061 J	
Turbidity, Field	NTU			32.03		9.83					78.27			24.8	9.35	
Vanadium	mg/L															
Zinc	mg/L															

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	2022-13	2022-13	2022-13	2022-13	2022-13	2022-13	2022-13	2022-13	2022-13	2022-13	2022-13	2022-13	2022-13	2022-13
	Date	2023-09-22	2023-09-22	2024-03-15	2024-03-15	2024-04-15	2024-04-15	2024-04-15	2024-07-02	2024-07-02	2024-07-02	2024-08-30	2024-08-30	2024-08-30	2024-09-26
	Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L		140		170		170	170		170	170		170	170	
Aluminum	mg/L														
Antimony	mg/L		0.002 U		0.002 U			0.002 U			0.0011 J			0.002 U	
Arsenic	mg/L		0.0049 J		0.0018 J			0.002 J			0.0012 J			0.002 J	
Barium	mg/L		0.19		0.26			0.33			0.49			0.64	
Beryllium	mg/L		0.001 U		0.001 U			0.001 U			0.00064 J			0.001 U	
Bicarbonate Alkalinity as CaCO3	mg/L		130		170		170	170		170	170		170	170	
Bicarbonate Alkalinity as HCO3	mg/L														
Boron	mg/L		0.2		0.23		0.27			0.27			0.32		
Bromide	mg/L														
Cadmium	mg/L		0.001 U		0.001 U			0.001 U			0.00028 J			0.00013 J	
Calcium	mg/L		12		15		20	18		25	27		27	36	
Carbonate Alkalinity as CaCO3	mg/L		13		5 U		5 U	5.5		5 U	5 U		5 U	5 U	
Chloride	mg/L		1300		1800		1800			2500			2500		
Chromium	mg/L		0.0028 J		0.005 U			0.005 U			0.005 U			0.005 U	
Cobalt	mg/L		0.00059 J		0.00027 J			0.00022 J			0.00048 J			0.00028 J	
Conductivity, Field	uS/cm	4233		6061		6775			7927			8883			10467
Copper	mg/L														
Dissolved Oxygen, Field	mg/L	0.72		1.37		0.23			0.49			0.44			1.17
Dissolved Solids, Total	mg/L		2200		2800		3200			3900			3500		
Fluoride	mg/L		2.8		2		1.7	2		1.5	1.5		1.4	1.2	
Iron	mg/L														
Lead	mg/L		0.00064 J		0.001 U			0.001 U			0.001 U			0.001 U	
Lithium	mg/L		0.018 J		0.031			0.029			0.036			0.036	
Magnesium	mg/L		3.1		3.9		5.4	4.7		6.8	7.5		7.3	9.5	
Manganese	mg/L														
Mercury	mg/L		0.0002 U		0.0002 U			0.0002 U			0.0002 U			0.0002 U	
Molybdenum	mg/L		0.075		0.082			0.083			0.055			0.052	
Nickel	mg/L														
Oxidation-Reduction Potential, Field	mV	-60.8		-111.9		-116.7			-83.9			-27.2			-7
pH, Field	pH units	8.69		8.22		8.33			8.06			7.99			7.92
Potassium	mg/L		2.5		2.4		3	2.7		3	3.3		3.1	3.8	
Radium-226	pCi/L		0.423		0.39			0.46			0.497			0.592	
Radium-226/228	pCi/L		1.12		0.965			1.34			1.42			1.9	
Radium-228	pCi/L		0.698		0.575			0.879			0.923			1.31	
Redox Potential, Field	mV														
Selenium	mg/L		0.005 U		0.005 U			0.005 U			0.005 U			0.005 U	
Silver	mg/L														
Sodium	mg/L		900		1200		1300	1300		1400	1500		1600	1700	
Strontium	mg/L														
Sulfate	mg/L		11		8		6.2			6.4			6.9		
Temperature, Field	deg C	15.8		13.5		15.3			18.2			20.8			17.1
Thallium	mg/L		0.001 U		0.001 U			0.001 U			0.00036 J			0.001 U	
Turbidity, Field	NTU	18.53		9.96		4.83			9.3			3.84			4.86
Vanadium	mg/L														
Zinc	mg/L														

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	2022-13	2022-13	2022-13	2022-13	2022-13	2022-13	2022-13	2022-13	2022-13	2022-14	2022-14	2022-14	2022-14	2022-14
	Date	2024-09-26	2024-10-16	2024-10-16	2024-10-16	2024-12-03	2024-12-03	2024-12-03	2025-03-03	2025-09-17	2023-09-20	2023-09-20	2023-09-20	2023-12-14	2023-12-14
	Sample Type	N	N	N	N	N	N	N	N	N	FD	N	N	N	N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L	170		170	170		170	170	180	170	120		120		120 B
Aluminum	mg/L														
Antimony	mg/L	0.002			0.002 U			0.002 U	0.002 U	0.002 U	0.002 U		0.002 U		
Arsenic	mg/L	0.0015			0.002 J			0.0016 J	0.0011 J	0.0012 J	0.0053		0.0055		
Barium	mg/L	0.76			0.73			0.78	1.1	0.63	5.3		5.8		
Beryllium	mg/L	0.001			0.001 U			0.001 U	0.001 U	0.001 U	0.001 U		0.001 U		
Bicarbonate Alkalinity as CaCO3	mg/L	170		170	170		170	170	180	170	120		120		120 B
Bicarbonate Alkalinity as HCO3	mg/L														
Boron	mg/L	0.32		0.31			0.31		0.35	0.32 J	0.29		0.3		0.35
Bromide	mg/L														
Cadmium	mg/L	0.00014			0.001 U			0.001 U	0.001 U	0.001 U	0.001 U		0.001 U		
Calcium	mg/L	40		44	41		34	43	55	33	280		300		270
Carbonate Alkalinity as CaCO3	mg/L	5		5 U	5 U		5 U	5 U	5 U	5 U	5 U		5 U		5 U
Chloride	mg/L	3300		3100			2700		3000	2800	10000		12000		9900
Chromium	mg/L	0.005			0.005 U			0.005 U	0.005 U	0.005 U	0.004 J		0.0057		
Cobalt	mg/L	0.00024			0.00024 J			0.00026 J	0.0003 J	0.00023 J	0.0026		0.0028		
Conductivity, Field	uS/cm		10683			9997			10539	8612		21765		27491	
Copper	mg/L														
Dissolved Oxygen, Field	mg/L		0.77			1.82			1.17	0.23		1.39		3.72	
Dissolved Solids, Total	mg/L	5100		3600			3500		6200	4400	14000		11000		11000
Fluoride	mg/L	1		1.3	1.3		1.5	1.3	1.1	1.5	0.5 U		0.5 U		1 U
Iron	mg/L														
Lead	mg/L	0.001			0.001 U			0.001 U	0.001 U	0.001 U	0.0013		0.0019		
Lithium	mg/L	0.047			0.048			0.05	0.058	0.043	0.14		0.14		
Magnesium	mg/L	11		11	10		8.6	11	16	9.4	78		82		80
Manganese	mg/L														
Mercury	mg/L	0.0002			0.0002 U			0.0002 U	0.0002 U	0.0002 U	0.0002 U		0.0002 U		
Molybdenum	mg/L	0.042			0.046			0.041	0.027	0.047	0.017		0.017		
Nickel	mg/L														
Oxidation-Reduction Potential, Field	mV		-11.1			112.5			68.2	-106.9		-47.1		-145.7	
pH, Field	pH units		7.98			7.91			7.88	7.73		7.35		7.4	
Potassium	mg/L	4.2		4.4	4.1		3.6	4.5	5.1	3.5	9.7		10		9.5
Radium-226	pCi/L	0.832			0.868			0.958	1	0.541 J	6.99		8.4		
Radium-226/228	pCi/L	1.62			1.73 J			1.93	2.56	1.34 J	13.5		15.1		
Radium-228	pCi/L	0.787			0.86 J			0.97	1.56	0.797	6.46		6.68		
Redox Potential, Field	mV														
Selenium	mg/L	0.005			0.005 U			0.005 U	0.005 U	0.005 U	0.005 U		0.005 U		
Silver	mg/L														
Sodium	mg/L	2200		2100	1900		1900	2000	2400	1900	4900		5200		5100
Strontium	mg/L														
Sulfate	mg/L	6.5		10			5.8		5.1	6.2	28 J		170 J		10 J
Temperature, Field	deg C		14.9			9.9			11.5	14.9		14.7		11	
Thallium	mg/L	0.001			0.001 U			0.001 U	0.001 U	0.001 U	0.001 U		0.001 U		
Turbidity, Field	NTU		3.41			7.78			4.58	7.29		52.39		40.71	
Vanadium	mg/L														
Zinc	mg/L														

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	2022-14	2022-14	2022-14	2022-14	2022-14	2022-14	2022-14	2022-14	2022-14	2022-14	2022-14	2022-14	2022-14	2022-14
	Date	2023-12-14	2024-03-12	2024-03-12	2024-04-12	2024-04-12	2024-04-12	2024-07-02	2024-07-02	2024-07-02	2024-08-30	2024-08-30	2024-08-30	2024-09-18	2024-09-18
	Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L	120 B		150		170	170		180	220		150	180		180
Aluminum	mg/L														
Antimony	mg/L	0.00059 J		0.002 U			0.00083 J			0.0014 J			0.0011 J		0.00059
Arsenic	mg/L	0.0013 J		0.0015 J			0.0014 J			0.0026 J			0.0027 J		0.0011
Barium	mg/L	3.6		2.4			1.7			1.4			2.7		2.2
Beryllium	mg/L	0.001 U		0.001 U			0.001 U			0.001 U			0.00033 J		0.001
Bicarbonate Alkalinity as CaCO3	mg/L	120 B		150		170	170		180	220		150	180		180
Bicarbonate Alkalinity as HCO3	mg/L														
Boron	mg/L			0.37		0.37			0.37			0.41			0.39
Bromide	mg/L														
Cadmium	mg/L	0.001 U		0.001 U			0.001 U			0.00025 J			0.00021 J		0.00015
Calcium	mg/L	280		290		290	300		270	280		290	290		320
Carbonate Alkalinity as CaCO3	mg/L	5 U		5 U		5 U	5 U		5 U	5 U		5 U	5 U		5
Chloride	mg/L			10000		9700			9600			10000			11000
Chromium	mg/L	0.0013 J		0.0028 J			0.0041 J			0.025			0.026		0.013
Cobalt	mg/L	0.0028		0.0026			0.0026			0.0046			0.0045		0.0031
Conductivity, Field	uS/cm		26892		26614			25837			28019			26115	
Copper	mg/L														
Dissolved Oxygen, Field	mg/L		1.38		0.22			3.93			4.21			0.7	
Dissolved Solids, Total	mg/L			19000		15000			14000			15000			18000
Fluoride	mg/L	0.24 J		1 U		2.5 U	2.5 U		0.36 J	0.34 J		0.39 J	0.36 J		5
Iron	mg/L														
Lead	mg/L	0.001 U		0.00053 J			0.00096 J			0.0036			0.0052		0.0035
Lithium	mg/L	0.13		0.14			0.14			0.14			0.11		0.14
Magnesium	mg/L	81		79		85	82		80	81		84	80		82
Manganese	mg/L														
Mercury	mg/L	0.0002 U		0.0002 U			0.0002 U			0.0002 U			0.0002 U		0.0002
Molybdenum	mg/L	0.018		0.019			0.019			0.018			0.02		0.018
Nickel	mg/L														
Oxidation-Reduction Potential, Field	mV		-136.1		-138.3			83.5			78.1			-120.1	
pH, Field	pH units		7.39		7.3			7.08			7.26			7.16	
Potassium	mg/L	9.6		9.4		9.8 J	9.4		9.4	10		9.7	9.9		10
Radium-226	pCi/L	5.57		3.23			2.09			1.77			3.31		2.85
Radium-226/228	pCi/L	9.95		6.06 J			4.45			3.36			5.33		5.93
Radium-228	pCi/L	4.38		2.83 J			2.36			1.58			2.02		3.08
Redox Potential, Field	mV														
Selenium	mg/L	0.005 U		0.00089 J			0.005 U			0.001 J			0.005 U		0.005
Silver	mg/L														
Sodium	mg/L	5100		5200		5300	5300		4800	5100		5200	5100		5300
Strontium	mg/L														
Sulfate	mg/L			92		150			220			110			150
Temperature, Field	deg C		13		12.2			17			25.7			17.3	
Thallium	mg/L	0.001 U		0.001 U			0.001 U			0.001 U			0.001 U		0.001
Turbidity, Field	NTU		121.18		38.23			51.47			148.47			27.85	
Vanadium	mg/L														
Zinc	mg/L														

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
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Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	2022-14	2022-14	2022-14	2022-14	2022-14	2022-14	2022-14	93100	93100	93100	93100	93100	93100	93100
	Date	2024-10-17	2024-10-17	2024-10-17	2024-12-06	2024-12-06	2025-02-28	2025-09-19	2016-08-23	2016-10-05	2016-12-02	2017-02-02	2017-03-29	2017-04-28	2017-06-12
	Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L		160	160		170	170	150			393	359			
Aluminum	mg/L												1.8 J	0.044 J	3.8 B
Antimony	mg/L			0.00065 J		0.0015 J	0.001 J	0.002 U	4E-05 J	6E-05 J	5E-05 J	5E-05 J	0.0012 J	0.002 U	0.002 U
Arsenic	mg/L			0.0019 J		0.0023 J	0.0014 J	0.0012 J	0.00164	0.00207	0.00174	0.00156	0.002 J	0.0016 J	0.002 J
Barium	mg/L			3.3		4.3	2.2	4.7	0.602	0.69	0.468	0.521	0.64 B	0.65	0.65
Beryllium	mg/L			0.001 U		0.00038 J	0.001 U	0.001 U	1E-05 J	5.3E-05	1E-05 J	1E-05 J	0.001 U	0.001 U	0.001 U
Bicarbonate Alkalinity as CaCO3	mg/L		160	160		170	170	150							
Bicarbonate Alkalinity as HCO3	mg/L														
Boron	mg/L		0.38			0.42	0.4	0.41 J	0.432	0.429	0.39	0.415	0.45	0.47 B	0.48
Bromide	mg/L										7.81	8.8	8.9 J	8.9 J	10
Cadmium	mg/L			9.7E-05 J		0.00019 J	0.00038 J	0.00031 J	4E-05 U	1E-05 J	4E-05 U	4E-05 U	0.001 U	0.001 U	0.001 U
Calcium	mg/L		290	280		300	290	310	20.3	22.2	14.1	16.8	17 B	16	20
Carbonate Alkalinity as CaCO3	mg/L		5	5 U		5 U	5 U	5 U							
Chloride	mg/L		10000			10000	11000	11000	2180	2310	1770	199	2200	2200	2100
Chromium	mg/L			0.019		0.016	0.0033 J	0.0028 J	0.0022	0.0049	0.00586	0.00582	0.0098	0.002 U	0.04
Cobalt	mg/L			0.0029		0.0054	0.0019	0.0014	0.00062	0.00129	0.00235	0.00195	0.0012	0.00027 J	0.0099
Conductivity, Field	uS/cm	27147			28364		25806	26598	6544	7642	5904	7014			
Copper	mg/L												0.0028 B	0.002 U	0.0051 B
Dissolved Oxygen, Field	mg/L	0.94			6.54		0.92	0.35	1.22	0.51	0.91	1.18			
Dissolved Solids, Total	mg/L		8500			16000	13000	13000	3630	3980	3420	3600	3900 J	3700 J	3600
Fluoride	mg/L		5	0.48 J		0.47 J	0.45 J	0.53	2.17	2.05	1.97	2.18	2.4	2.2	2.3
Iron	mg/L												1.7 JB	0.082 J	1
Lead	mg/L			0.0023		0.0055	0.0007 J	0.002	0.000244	0.00093	0.000135	0.000189	0.001 J	0.001 U	0.00046 J
Lithium	mg/L			0.15		0.16	0.15	0.15	0.048	0.058	0.046	0.04	0.044	0.047	0.043
Magnesium	mg/L		88	85		93	87	85			4.4	5.37	6.2 B	5.6	6.1
Manganese	mg/L												0.046	0.032	0.055
Mercury	mg/L			0.0002 U		0.0002 U	0.0002 U	0.0002 U	5E-06 U	3E-06 J	5E-06 U	5E-06 U	0.0002 U	0.0002 U	0.0002 U
Molybdenum	mg/L			0.018		0.017	0.019	0.019	0.087	0.0889	0.125	0.106	0.11	0.11	0.11 J
Nickel	mg/L												0.0065	0.002 U	0.038
Oxidation-Reduction Potential, Field	mV	-108.3			152.5		93.3	-50.1							
pH, Field	pH units	7.15			7.12		7.23	7.24	7.97	7.85	7.78	7.87	7.82	7.86	7.77
Potassium	mg/L		9.5	9.7		10	9.3	9.1			3.87	4.57	3.1 B	2.6	2.7
Radium-226	pCi/L			1.65		4.38	1.29	3.07 J	0.637	0.909	0.863	0.544	0.538	0.565	0.736
Radium-226/228	pCi/L			4.32		8.65	2.24	7.05 J	2.587	1.969	1.538	1.252	0.869	1.14	1.19
Radium-228	pCi/L			2.67		4.27 G	0.955	3.97 J	1.95	1.06	0.675	0.708	0.332 U	0.58	0.458
Redox Potential, Field	mV								-98.5	788	35.3	-138.6			
Selenium	mg/L			0.005 U		0.005 UF1	0.00097 J	0.005 U	0.0001 J	0.0002 J	0.0003	0.0002 J	0.0007 J	0.005 U	0.005 U
Silver	mg/L												0.001 U	0.001 U	0.00036 J
Sodium	mg/L		5800	5300		5500	6000	5700			1270	1050	1400 JB	1500	1500
Strontium	mg/L										1.18	1.4	1.7 B	1.9	1.7 B
Sulfate	mg/L		82			51	46	22	11.4	8.4	12.2	9.9	15 J	13 J	15
Temperature, Field	deg C	14.7			12.1		12	15.3	19.02	18.6	14.9	14.1			
Thallium	mg/L			0.001 U		0.001 U	0.00067 J	0.00061 J	0.0001 U	3E-05 J	2E-05 J	4E-05 J	0.001 U	0.001 U	0.001 U
Turbidity, Field	NTU	78.43			279.96		13.29	18.86	7	42.7	7.4	15.3	31.1	6.4	2.8
Vanadium	mg/L														
Zinc	mg/L												0.02 U	0.02 U	0.02 U

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	93100	93100	93100	93100	93100	93100	93100	93100	93100	93100	93100	93100	93100	93100
	Date	2017-07-18	2017-07-18	2018-03-15	2018-09-24	2019-03-11	2019-03-11	2019-09-23	2020-03-19	2020-03-19	2020-09-22	2021-03-25	2021-09-28	2022-03-28	2022-09-16
	Sample Type	FD	N	N	N	FD	N	N	FD	N	N	N	N	N	FD
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L			360	320	320	320	330	330	330	320	330	330	330	320
Aluminum	mg/L	1.8	1.7											0.033 J	
Antimony	mg/L	0.002 U	0.002 U											0.002 U	
Arsenic	mg/L	0.0019 J	0.002 J											0.0018 J	
Barium	mg/L	0.66	0.66											0.51	
Beryllium	mg/L	0.001 U	0.001 U											0.001 U	
Bicarbonate Alkalinity as CaCO3	mg/L			360	320			330	330	330	320	320	330	330	320
Bicarbonate Alkalinity as HCO3	mg/L					320	320								
Boron	mg/L	0.49 JB	0.5 JB	0.45	0.45	0.48	0.49	0.46	0.47	0.47	0.48	0.44	0.46	0.51 J	0.44
Bromide	mg/L	8.7 J	8.8 J												
Cadmium	mg/L	0.001 U	0.001 U											0.0001 U	
Calcium	mg/L	17	17	14	18	17	17	18	17	18	19	18	17	15	16
Carbonate Alkalinity as CaCO3	mg/L			5 U	5 U	5 U	5 U	5 U	4.6 J	5 U	5 U	3 J	5 U	5 U	5 U
Chloride	mg/L	2200	2200	1800	2200	2100	2100	2000	2200	2200	2200	2100	2200	2000	2100 J
Chromium	mg/L	0.011	0.011											0.015	
Cobalt	mg/L	0.0033	0.0031											0.0024	
Conductivity, Field	uS/cm			6107					6772	6772	6702	6959	6635	6548	7123
Copper	mg/L	0.002 U	0.002 U											0.005 U	
Dissolved Oxygen, Field	mg/L			0.2										0.28	0.36
Dissolved Solids, Total	mg/L	3400 J	3600 J	3300	3100	3100	3100	2900	3200	3900	3100	3800	3300	2900 J	3900 J
Fluoride	mg/L	2.3	2.3	2.6	2.7	2.2	2.2	2.7	2.6	2.6	2.3	2.5	2.7	2.6	2.6 J
Iron	mg/L	0.42	0.41											0.099 J	
Lead	mg/L	0.001 U	0.001 U											0.0005 U	
Lithium	mg/L	0.048	0.048											0.039	
Magnesium	mg/L	6.2	6.2	4.1	5.4	5.9	6.1	6.3	5.3	5.6	5.8	5.7	5.3	5.5	5.1
Manganese	mg/L	0.045	0.044											0.028	
Mercury	mg/L	0.0002 U	0.0002 U											0.0002 U	0.0002 U
Molybdenum	mg/L	0.097	0.098											0.12	
Nickel	mg/L	0.0096	0.0087											0.012	
Oxidation-Reduction Potential, Field	mV													-2.2	-181.1
pH, Field	pH units		7.71	7.93	7.89		8.06	8.04	8.02	8.02	7.94	7.87	7.97	8.03	7.81
Potassium	mg/L	2.7	2.7	2.1	2.6	2.6	2.6	2.9	2.5	2.5	2.6	2.5	2.5	2.7	2.6
Radium-226	pCi/L	0.691 J	0.758 J											0.704	0.382
Radium-226/228	pCi/L	1.32	1.41											1.57	2.44 J
Radium-228	pCi/L	0.63	0.648											0.863	2.06 J
Redox Potential, Field	mV														
Selenium	mg/L	0.005 U	0.005 U											0.005 U	
Silver	mg/L	6.9E-05 J	6.3E-05 J											0.001 U	
Sodium	mg/L	1500 JB	1500 JB	1200	1400	1500	1500	1400	1400	1400	1400	1400	1400	1400	1300
Strontium	mg/L	1.7	1.7											1.5	
Sulfate	mg/L	14 J	14 J	22	16	17 J	18 J	16	17	17	13	16	16	14	13 J
Temperature, Field	deg C			15.2					16	16	17	15	17	12	20
Thallium	mg/L	0.001 U	0.001 U											0.001 U	
Turbidity, Field	NTU		6	4.6	1.18			7	4	4	1.4	2	2.6	4	53.35
Vanadium	mg/L	0.005 U	0.005 U												
Zinc	mg/L	0.02 U	0.02 U											0.02 U	

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	93100	93100	93100	93100	93100	93100	93100	93100	93100	93100	93100	93108	93108	93108
	Date	2022-09-16	2023-03-31	2023-09-26	2023-09-26	2024-03-25	2024-03-25	2024-10-02	2024-10-02	2024-10-02	2025-03-12	2025-09-19	2016-08-24	2016-10-06	2016-12-02
	Sample Type	N	N	N	N	N	N	FD	N	N	N	N	N	N	N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L	330	320		350		390	260		280	340	330			720
Aluminum	mg/L														
Antimony	mg/L		0.002 U		0.0011 J		0.0012 J	0.002		0.002	0.00061 J	0.002 U	0.0001	3E-05 J	0.00023
Arsenic	mg/L		0.0015 J		0.0031 J		0.0025 J	0.0016		0.0016	0.0019 J	0.0018 J	0.00196	0.00153	0.0025
Barium	mg/L		0.52		0.54		0.37	0.54		0.53	0.53	0.51	0.174	0.164	0.199
Beryllium	mg/L		0.001 U		0.001 U		0.001 U	0.001		0.001	0.001 U	0.001 U	4.1E-05	1E-05 J	0.000162
Bicarbonate Alkalinity as CaCO3	mg/L	330	320		350		390	260		280	320	330			
Bicarbonate Alkalinity as HCO3	mg/L														
Boron	mg/L	0.45	0.45		0.47		0.47	0.45		0.45	0.49	0.52 J	0.429	0.404	0.391
Bromide	mg/L														2.42
Cadmium	mg/L		0.001 U		0.00026 J		0.001 U	0.001		0.001	0.00015 J	0.001 U	7E-05	3E-05	0.0003
Calcium	mg/L	17	15		17		11	17		17	16	17	6.09	5.87	6.55
Carbonate Alkalinity as CaCO3	mg/L	5 U	5 U		5 U		5 U	5		5	19	5 U			
Chloride	mg/L	2200 J	2100		2000		1600	2200		2200	2000	2000	745	731	681
Chromium	mg/L		0.0035 J		0.0054		0.025	0.0049		0.005	0.0037 J	0.0065	0.0086	0.0062	0.0263
Cobalt	mg/L		0.0061		0.0034		0.0027	0.0071		0.007	0.0039	0.0072	0.00113	0.00039	0.00393
Conductivity, Field	uS/cm	7123	6482	6186		6324			7196		6783	6749	3490	3589	3580
Copper	mg/L														
Dissolved Oxygen, Field	mg/L	0.36	0.57	0.99		1.7			0.45		0.6	0.14	1.67	0.81	1.01
Dissolved Solids, Total	mg/L	460 J	3200		3200		2700	9900 J		3600 J	3400	3300	1940	1900	1950
Fluoride	mg/L	2.6 J	2.5		2.5		2.7	2.4		2.4	2.7	2.7	4.59	4.46	4.15
Iron	mg/L														
Lead	mg/L		0.001 U		0.00078 J		0.00073 J	0.001		0.001	0.001 U	0.001 U	0.00206	0.000516	0.00639
Lithium	mg/L		0.039		0.044		0.033	0.042		0.042	0.04	0.042	0.027	0.028	0.033
Magnesium	mg/L	5.2	5		5.4		3.5	5.5		5.4	5.1	5.1			2.33
Manganese	mg/L														
Mercury	mg/L	0.0002 U	0.0002 U		0.0002 U		0.0002 U	0.0002		0.0002	0.0002 U	0.0002 U	5E-06	1.5E-05	1E-05
Molybdenum	mg/L		0.11		0.13		0.15	0.11		0.11	0.12	0.12	0.254	0.267	0.237
Nickel	mg/L														
Oxidation-Reduction Potential, Field	mV	-181.1	7.95	-67		57.7			-121.7		102	-133.7			
pH, Field	pH units	7.81	7.95	7.91		8.01			7.96		7.94	8.02	7.59	7.87	7.96
Potassium	mg/L	2.7	2.3		2.7		2.2	2.3		2.2	2.5	2.4			2.59
Radium-226	pCi/L	0.394	0.699		0.81		0.109 U	0.594		0.589	0.601	0.522 J	0.74	0.639	1.02
Radium-226/228	pCi/L	1.08	1.07		2.24		0.336 U	1.13		1.59	1.24	0.813 U	2.68	2.059	1.229
Radium-228	pCi/L	0.687 U	0.367 U		1.43		0.227 U	0.536 U		1	0.643 U	0.291 U	1.94	1.42	0.209
Redox Potential, Field	mV												-29.9	-145.3	-112.7
Selenium	mg/L		0.005 U		0.00094 J		0.005 U	0.00091		0.005	0.005 U	0.005 U	0.0002 J	6E-05 J	0.0004
Silver	mg/L														
Sodium	mg/L	1400	1300		1500		1100	1400		1300	1400	1400			827
Strontium	mg/L														0.434
Sulfate	mg/L	13 J	15		35		17	18		18	16	16	73.1	66.1	68.1
Temperature, Field	deg C	20	13.7	16.3		16.2			17.9		18	18.5	18.33	15	12.9
Thallium	mg/L		0.001 U		0.0011		0.00057 J	0.001		0.001	0.001 U	0.001 U	0.000125	4E-05 J	0.000159
Turbidity, Field	NTU	53.35	24.9	21.98		49.82			10.23		5.7	14.18	28.9	9.7	18.3
Vanadium	mg/L														
Zinc	mg/L														

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	93108	93108	93108	93108	93108	93108	93108	93108	93108	93108	93108	93108	93108	93108
	Date	2017-02-02	2017-03-23	2017-05-02	2017-06-12	2017-07-18	2018-03-15	2018-09-14	2021-09-20	2022-03-28	2022-09-19	2023-04-04	2023-04-04	2023-09-25	2023-09-25
	Sample Type	N	N	N	N	N	N	N	N	N	N	FD	N	N	N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L	672					640	640	520	460	470	500	500		500
Aluminum	mg/L		2.5 J	0.13	0.041 JB	7.1				0.036 J					
Antimony	mg/L	0.00016	0.002 U	0.002 U	0.002 U	0.002 U				0.002 U		0.002 U	0.002 U		0.002 U
Arsenic	mg/L	0.00166	0.0018 J	0.0013 J	0.0016 J	0.0029 J				0.0027		0.0028 J	0.0031 J		0.0035 J
Barium	mg/L	0.157	0.19 B	0.18	0.18	0.22				0.43		0.42	0.4		0.47
Beryllium	mg/L	0.000107	0.001 U	0.001 U	0.001 U	0.00047 J				0.001 U		0.001 U	0.001 U		0.001 U
Bicarbonate Alkalinity as CaCO3	mg/L						640	640	520	460	470	500	500		500
Bicarbonate Alkalinity as HCO3	mg/L														
Boron	mg/L	0.411	0.5	0.48	0.46	0.48 JB	0.45	0.47	0.44	0.48 J	0.45	0.45	0.43		0.41
Bromide	mg/L	2.16	2.4 J	2.7 J	2.8	2.6 J									
Cadmium	mg/L	0.00019	0.001 U	0.001 U	0.0014	0.00024 J				0.0001 U		0.001 U	0.001 U		0.001 U
Calcium	mg/L	5.85	6 B	5.9	5.8	6.4	5.6	6.4	15	13	14	13	13		15
Carbonate Alkalinity as CaCO3	mg/L						5 U	5 U	5 U	5 U	5 U	5 U	5 U		5 U
Chloride	mg/L	688	700	820	790	750	770	720	1500	1600	1600	1700	1600		1800
Chromium	mg/L	0.025	0.02	0.004	0.002 U	0.067				0.005 U		0.005 U	0.005 U		0.005 U
Cobalt	mg/L	0.00262	0.002	0.00037 J	0.00025 J	0.0059				0.0005 U		0.001 U	0.001 U		0.001 U
Conductivity, Field	uS/cm	3545					3606		5299	5821	6189		5266	5270	
Copper	mg/L		0.008 B	0.002 U	0.002 U	0.021				0.005 U					
Dissolved Oxygen, Field	mg/L	1.42					0.64			0.16	0.4		0.42	0.96	
Dissolved Solids, Total	mg/L	1900	1800 J	1900 J	2000	1800 J	2100	1700	2800	2200 J	3200	2900	3000		3200
Fluoride	mg/L	4.57	5.4	5.1	5.3	5.5	4.6	4.9	3.2	3.1	3.1 J	3.3	3.3		3.2
Iron	mg/L		2.7 JB	0.25	0.12	8.3				0.58					
Lead	mg/L	0.00385	0.0026 J	0.0007 J	0.001 U	0.0074				0.0005 U		0.001 U	0.001 U		0.001 U
Lithium	mg/L	0.024	0.025	0.025	0.029	0.033				0.038		0.036	0.036		0.042
Magnesium	mg/L	2.18	2.2 B	2	1.8	2.9	1.7	1.9 J	3.8	4.6	4.3	3.8	3.7		4.6
Manganese	mg/L		0.051	0.027	0.031	0.092				0.18					
Mercury	mg/L	9E-06	0.0002 U	0.0002 U	0.0002 U	0.0002 U				0.0002 U	0.0002 U	0.0002 U	0.0002 U		0.0002 U
Molybdenum	mg/L	0.23	0.25	0.24	0.23 J	0.24				0.099		0.11	0.1		0.096
Nickel	mg/L		0.014	0.0033	0.0015 J	0.05				0.0025 J					
Oxidation-Reduction Potential, Field	mV									-155.9	-188.4		-138	-185.8	
pH, Field	pH units	7.9	8.07	7.99	7.87	7.84	7.97	7.7	7.48	7.43	7.49		7.35	7.53	
Potassium	mg/L	2.53	1.8 B	1.4	1.3	2.7	1.3	1.4 J	1.9	2.2	1.9	1.8	1.8		2
Radium-226	pCi/L	0.322	0.355	0.289	0.351	0.527				0.706	0.562	0.644	0.527		0.615
Radium-226/228	pCi/L	0.502	0.471	0.919	0.704	2.09				1.74	1.8 J	1.68	1.14		1.78 J
Radium-228	pCi/L	0.18	0.116 U	0.63	0.353	1.56				1.04	1.24 J	1.03	0.61		1.16 J
Redox Potential, Field	mV	-121.3													
Selenium	mg/L	0.0002	0.005 U	0.005 U	0.005 U	0.005 U				0.005 U		0.005 U	0.005 U		0.005 U
Silver	mg/L		0.001 U	0.001 U	0.001 U	6.2E-05 J				0.00052 J					
Sodium	mg/L	595	790 JB	790 B	790	760 JB	810	820	1100	1200	1300	1200	1200		1300
Strontium	mg/L	0.41	0.46 B	0.5 B	0.45 B	0.46				1.2					
Sulfate	mg/L	72.3	83 J	82	84	90	85	85	39	22	27	16	16		22
Temperature, Field	deg C	12.9					14.8		15	12	16		13.8	14.6	
Thallium	mg/L	0.000126	0.001 U	0.001 U	0.001 U	0.00021 J				0.001 U		0.001 U	0.001 U		0.00053 J
Turbidity, Field	NTU	15.9	50.1	16.4	8.6	287.1	4.8	10.1	7.2	3.3	0.55		2.87	5.28	
Vanadium	mg/L		0.0045 J			0.013									
Zinc	mg/L		0.019 J	0.02 U	0.02 U	0.036				0.02 U					

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
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B: Compound was found in the blank and sample.
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Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	93108	93108	93108	93108	93108	93108	94136	94136	94136	94136	94136	94136	94136	94136
	Date	2024-03-15	2024-03-15	2024-09-19	2024-09-19	2025-03-05	2025-09-15	2016-08-24	2016-10-06	2016-12-01	2017-02-01	2017-03-23	2017-04-28	2017-06-09	2017-07-17
	Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	FD
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L		450		450	450	420			331	323				
Aluminum	mg/L											0.057	0.037 J	0.69	0.05 U
Antimony	mg/L		0.002 U		0.002	0.002 U	0.002 U	2E-05 J	3E-05 J	2E-05	1E-05 J	0.0017 J	0.002 U	0.01 U	0.002 U
Arsenic	mg/L		0.0016 J		0.0044	0.0051	0.0039 J	0.00037	0.00048	0.00042	0.00039	0.0012 J	0.005 U	0.025 U	0.005 U
Barium	mg/L		0.44		0.53	0.47	0.44	0.0865	0.0894	0.102	0.0877	0.11 B	0.1	0.099 B	0.11
Beryllium	mg/L		0.001 U		0.001	0.001 U	0.001 U	2E-05 U	1E-05 J	1E-05	5E-06 J	0.001 U	0.001 U	0.001 U	0.001 U
Bicarbonate Alkalinity as CaCO3	mg/L		450		450	450	420								
Bicarbonate Alkalinity as HCO3	mg/L														
Boron	mg/L		0.39		0.44	0.43	0.42 J	0.405	0.395	0.349	0.362	0.46	0.43 B	0.54	0.42 JB
Bromide	mg/L									4.07	3.25	3.7 J	3.7 J	3.8 J	4.2 J
Cadmium	mg/L		0.001 U		0.00013	0.001 U	0.001 U	6E-06 J	6E-06 J	6E-06	5E-06 J	0.001 U	0.001 U	0.005 U	0.001 U
Calcium	mg/L		15		19	15	15	23.2	22	19.2	17.7	19 B	17	16	17
Carbonate Alkalinity as CaCO3	mg/L		5 U		5	5 U	5 U								
Chloride	mg/L		1800		2000	1800	1800	888	927	887	882	910	900	940	950
Chromium	mg/L		0.0012 J		0.005	0.005 U	0.005 U	0.0012	0.002	0.0013	0.00124	0.0019 J	0.002 U	0.005 J	0.0032
Cobalt	mg/L		0.00019 J		9.4E-05	0.001 U	0.001 U	0.000107	0.00029	0.00015	0.000122	0.0004 J	0.00079 J	0.0014 J	0.0007 J
Conductivity, Field	uS/cm	6178		5539		6198	6410	3541	3581	3578	3558				
Copper	mg/L											0.00085 JB	0.002 U	0.01 U	0.002 U
Dissolved Oxygen, Field	mg/L	1.57		0.55		0.58	0.19	1.08	0.58	0.77	1.7				
Dissolved Solids, Total	mg/L		2900		3400	3100	3300	1850	1820	1840	1750	1800 J	2000 J	2000	1800 J
Fluoride	mg/L		3.2		2.7	3.1	3.1	0.96	0.94	1.03	0.9	1.2	1.2	1.4	1.1
Iron	mg/L											0.067 JB	0.1 U	0.6	0.1 U
Lead	mg/L		0.001 U		0.001	0.001 U	0.001 U	5.3E-05	0.000164	0.000142	7.9E-05	0.00031 J	0.001 U	0.001 U	0.001 U
Lithium	mg/L		0.043		0.042	0.04	0.035	0.028	0.033	0.035	0.029	0.026	0.028	0.025	0.03
Magnesium	mg/L		4.3		5.3	4.6	4.3			4.46	4.13	4.5 B	3.9	4.1 J	4.3
Manganese	mg/L											0.058	0.03	0.079	0.098
Mercury	mg/L		0.0002 U		0.0002	0.0002 U	0.0002	5E-06 U	5E-06 U	2E-06	5E-06 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Molybdenum	mg/L		0.077		0.088	0.1	0.083	0.0135	0.015	0.0137	0.0133	0.02	0.015	0.017 J	0.015
Nickel	mg/L											0.0015 J	0.004	0.01 U	0.002 U
Oxidation-Reduction Potential, Field	mV	-182.5		-177.1		-154.1	-196.8								
pH, Field	pH units	7.43		7.36		7.48	7.56	7.54	7.69	7.72	7.74	7.81	7.76	7.8	
Potassium	mg/L		1.9		2.4	2.1	2			2.38	4.27	2.1 B	2	2.1 J	2
Radium-226	pCi/L		0.789		0.559	0.705	0.617 J	0.312	0.984	0.122	0.304	0.211	0.338	0.191	0.123
Radium-226/228	pCi/L		1.96		1.17	1.37	2.05 J	2.592	2.264	1.642	0.665	0.398	0.584	0.528	0.521
Radium-228	pCi/L		1.17		0.614	0.666 U	1.43	2.28	1.28	1.52	0.361	0.188 U	0.246 U	0.337 U	0.398
Redox Potential, Field	mV							170.7	11.5	-50.1	26.4				
Selenium	mg/L		0.005 U		0.0013	0.005 U	0.005 U	4E-05 J	8E-05 J	7E-05	5E-05 J	0.0012 J	0.005 U	0.025 U	0.005 U
Silver	mg/L											0.001 U	0.001 U	0.005 U	0.001 U
Sodium	mg/L		1200		1400	1400	1300			557	496	750 JB	690	750	720 JB
Strontium	mg/L									0.686	0.616	0.74 B	0.69	0.65 B	0.73
Sulfate	mg/L		13		17	19	19	91.6	75.1	63.8	52.7	78 J	83	99	60
Temperature, Field	deg C	14.1		19.4		14.8	17	17.44	15.8	15.3	14				
Thallium	mg/L		0.00038 J		0.001	0.001 U	0.001 U	1E-05 J	9.9E-05	1E-05	5E-05 U	0.001 U	0.001 U	0.001 U	0.001 U
Turbidity, Field	NTU	7.02		1.46		3.63	3.85	4	8.4	9.2	21.1	6.4	195.4	8.5	
Vanadium	mg/L											0.00054 J			0.005 U
Zinc	mg/L											0.02 U	0.02 U	0.1 U	0.02 U

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	94136	94136	94136	94136	94136	94136	94136	94136	94136	94136	94136	94136	94136	94136
	Date	2017-07-17	2018-03-08	2018-03-08	2018-09-12	2019-03-07	2019-09-17	2019-09-17	2020-03-25	2020-09-25	2021-03-22	2021-09-19	2022-03-23	2022-09-21	2023-03-30
	Sample Type	N	FD	N	N	N	FD	N	N	N	N	N	N	N	N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L				310	310	330	340	370	340	360	300	200 J	310	320
Aluminum	mg/L	0.05 U											0.21		
Antimony	mg/L	0.002 U											0.002 U		0.002 U
Arsenic	mg/L	0.005 U											0.00075 J		0.00094 J
Barium	mg/L	0.1											0.1		0.11
Beryllium	mg/L	0.001 U											0.001 U		0.001 U
Bicarbonate Alkalinity as CaCO3	mg/L				310		330	330	360	340	350	300	200 J	310	320
Bicarbonate Alkalinity as HCO3	mg/L					310									
Boron	mg/L	0.44 JB	0.49	0.54		0.33	0.41	0.44	0.48	0.41	0.46	0.35	0.45 J	0.35	0.35
Bromide	mg/L	4.2 J													
Cadmium	mg/L	0.001 U											0.0001 U		0.001 U
Calcium	mg/L	17	29	34	17	15	14	14	13	14	14	14	15	13	13
Carbonate Alkalinity as CaCO3	mg/L				5 U	5 U	5.9	6	6.1	5.1	7.7	5 U	5 U	5 U	5 U
Chloride	mg/L	960	940	950	970	900	870	870	960	830	830	930	1100	920 J	1000
Chromium	mg/L	0.001 J											0.005 U		0.0061
Cobalt	mg/L	0.00065 J											0.00037 J		0.0012
Conductivity, Field	uS/cm			3896					3409	3397	3396	3381	3977	3521	3577
Copper	mg/L	0.002 U											0.005 U		
Dissolved Oxygen, Field	mg/L			4.05									0.13	0.36	0.46
Dissolved Solids, Total	mg/L	1900 J	1900	1900		1700	2000	1900	1700	1400	1600	1800	1600	1100 J	1800
Fluoride	mg/L	1.1	1.1	1.1	1.2	1.1	1.3	1.4	1.4	1.4	1.4	1.3	1.3	1.3 U	1.2
Iron	mg/L	0.1 U											0.22 J		
Lead	mg/L	0.001 U											0.0005 U		0.00073 J
Lithium	mg/L	0.029											0.029		0.027
Magnesium	mg/L	4.3	6.5	7.4	3.9	3.8	3.5	3.5	3.5	3.6	3.5	3.5	3.9	3.5	3.4
Manganese	mg/L	0.089											0.11		
Mercury	mg/L	0.0002 U											0.0002 U	0.0002 U	0.0002 U
Molybdenum	mg/L	0.015											0.014 J		0.014
Nickel	mg/L	0.002 U											0.005 U		
Oxidation-Reduction Potential, Field	mV												-57.8	-156.4	69
pH, Field	pH units	7.89		7.74	7.87	8		8.02	8.06	8.07	7.95	7.87	7.88	7.92	7.93
Potassium	mg/L	2	2.4	2.6	2.1	1.8	1.9	1.9	1.9	1.9	1.9	1.7	2.2	1.8	1.8
Radium-226	pCi/L	0.22											0.434	0.289	0.623
Radium-226/228	pCi/L	0.765											0.845	0.352 U	0.755 U
Radium-228	pCi/L	0.545											0.411	0.0631 U	0.131 U
Redox Potential, Field	mV														
Selenium	mg/L	0.005 U											0.0012 J		0.005 U
Silver	mg/L	0.001 U											0.001 U		
Sodium	mg/L	720 JB	790	800	760	710	750	760	690	690	710	650	740	720	670
Strontium	mg/L	0.73											0.66		
Sulfate	mg/L	61	150	180	75	60	81	85	73	67	65	59	55	52	55
Temperature, Field	deg C			14.7					15	16	16	17	16	18.1	15.5
Thallium	mg/L	0.001 U											0.001 U		0.001 U
Turbidity, Field	NTU	5.9		1.1	2.94			12	7	2.9	2	5.6	4	14.87	41.74
Vanadium	mg/L	0.005 U													
Zinc	mg/L	0.02 U											0.02 U		

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	94136	94136	94136	94136	94136	94136	94136	94136	94136	94137	94137	94137	94137	94137
	Date	2023-09-22	2023-09-22	2023-09-22	2024-03-15	2024-03-15	2024-09-27	2024-09-27	2025-03-07	2025-09-17	2016-08-24	2016-10-06	2016-12-01	2017-02-01	2017-03-23
	Sample Type	FD	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L	340		340		330		350	350	330			341	360	
Aluminum	mg/L														0.039 J
Antimony	mg/L	0.002 U		0.002 U		0.002 U		0.0011	0.00082 J	0.002 U	5E-05	3E-05 J	3E-05	4E-05 J	0.00038 J
Arsenic	mg/L	0.00079 J		0.005 U		0.005 U		0.0017	0.005 U	0.0039 J	0.00179	0.00244	0.00211	0.00138	0.0026 J
Barium	mg/L	0.11		0.11		0.1		0.12	0.11	0.11	0.0524	0.0578	0.0553	0.049	0.068 B
Beryllium	mg/L	0.001 U		0.001 U		0.001 U		0.001	0.001 U	0.001 U	2E-05 U	2E-05 U	5E-06	2E-05 U	0.001 U
Bicarbonate Alkalinity as CaCO3	mg/L	340		340		330		350	330	330					
Bicarbonate Alkalinity as HCO3	mg/L														
Boron	mg/L	0.3		0.29		0.31		0.41	0.39	0.38 J	0.021	0.017	0.022	0.037	0.04 J
Bromide	mg/L												0.106	0.085	0.11 J
Cadmium	mg/L	0.001 U		0.001 U		0.001 U		8E-05	0.00012 J	0.00011 J	6E-05	2E-05	7E-05	5E-05	0.001 U
Calcium	mg/L	14		13		13		14	12	14	147	163	154	148	160 B
Carbonate Alkalinity as CaCO3	mg/L	5 U		5 U		5 U		5	17	5 U					
Chloride	mg/L	1000		940		910		910	840	920	27.5	27.7	27.8	27.5	29
Chromium	mg/L	0.0085		0.0071		0.0035 J		0.011	0.019	0.0051	0.0035	0.0055	0.0014	0.00169	0.0031
Cobalt	mg/L	0.00066 J		0.00061 J		0.00048 J		0.00072	0.00053 J	0.00034 J	0.0922	0.495	0.0503	0.056	0.12
Conductivity, Field	uS/cm		3418		3590		3629		3517	3585	1252	1305	1283	1302	
Copper	mg/L														0.00065 JB
Dissolved Oxygen, Field	mg/L		1.56		1.82		0.67		0.78	0.4	1.08	0.73	0.83	1.29	
Dissolved Solids, Total	mg/L	1700		1700		1700		1800	1900	1800	958	856	867	883	890 J
Fluoride	mg/L	1.2		1.4		1.2		1.5	1.6	1.5	0.11	0.1 J	0.12	0.11	0.14
Iron	mg/L														0.67 JB
Lead	mg/L	0.001 U		0.001 U		0.001 U		0.00062	0.001 U	0.001 U	0.0002	0.000152	0.000156	7E-05	0.00019 J
Lithium	mg/L	0.029		0.026		0.029		0.028	0.025	0.026	0.011	0.017	0.015	0.007	0.0078 J
Magnesium	mg/L	3.7		3.6		3.4		3.8	3.4	3.6			47.9	47.4	51 B
Manganese	mg/L														0.088
Mercury	mg/L	0.0002 U		0.0002 U		0.0002 U		0.0002	0.0002 U	0.0002 U	8E-06	3E-06 J	5E-06	2E-06 J	0.0002 U
Molybdenum	mg/L	0.014		0.013		0.014		0.017	0.017	0.016	0.00275	0.00353	0.00287	0.00633	0.0034 J
Nickel	mg/L														0.0028
Oxidation-Reduction Potential, Field	mV		12.1		-58.1		-112.2		-19.3	-183.3					
pH, Field	pH units		7.91		7.93		8.02		7.97	8	7.11	6.93	6.98	7.02	7.03
Potassium	mg/L	1.9		1.9		1.8		2.2	2	2			1.82	2.18	1.7 B
Radium-226	pCi/L	0.592		0.501		0.556		0.349	0.347	0.218 U	0.171	1.71	0.29	0.257	0.239
Radium-226/228	pCi/L	2.36		1.72		1.35		1.03	1.09 J	0.682 J	2.681	2.373	1.268	3.127	0.261 U
Radium-228	pCi/L	1.76		1.22		0.792		0.681	0.743 J	0.464 U	2.51	0.663	0.978	2.87	0.0221 U
Redox Potential, Field	mV										-32.2	-21.4	-55.4	-74.7	
Selenium	mg/L	0.005 U		0.005 U		0.005 U		0.005	0.005 U	0.0012 J	5E-05 J	9E-05 J	5E-05	0.0001 U	0.00056 J
Silver	mg/L														6E-05 J
Sodium	mg/L	700		690		690		790	760	760			70.7	65	68 JB
Strontium	mg/L												0.298	0.276	0.32 B
Sulfate	mg/L	50		58		51		59	58	51	348	330	349	332	360 J
Temperature, Field	deg C		17.5		15.4		18.3		14.7	18.8	19.28	17	15.7	14	
Thallium	mg/L	0.001 U		0.001 U		0.001 U		0.001	0.001 U	0.001 U	4E-05 J	4E-05 J	4E-05	0.000166	0.001 U
Turbidity, Field	NTU		38.45		7.4		35.21		8.26	7.54	5.9	9.7	7.8	7.1	8
Vanadium	mg/L														0.00076 J
Zinc	mg/L														0.02 U

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	94137	94137	94137	94137	94137	94137	94137	94137	94137	94137	94137	94137	94137	94137
	Date	2017-04-28	2017-06-09	2017-07-17	2018-03-08	2018-09-12	2019-03-11	2019-09-17	2020-03-25	2020-09-25	2021-03-22	2021-09-19	2022-03-23	2022-09-21	2023-03-30
	Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L					330	330	340	350	330	340	310	210 J	370	350
Aluminum	mg/L	0.05 U	0.27	0.05 U									0.38 J		
Antimony	mg/L	0.002 U	0.002 U	0.002 U									0.002 U		0.002 U
Arsenic	mg/L	0.0012 J	0.0036 J	0.0028 J									0.024		0.0063
Barium	mg/L	0.056	0.065 B	0.059									0.058		0.048
Beryllium	mg/L	0.001 U	0.001 U	0.001 U									0.001 U		0.001 U
Bicarbonate Alkalinity as CaCO3	mg/L					330		340	350	330	340	310	210 J	370	350
Bicarbonate Alkalinity as HCO3	mg/L						330								
Boron	mg/L	0.028 JB	0.039 J	0.072 JB	0.035 J^		0.037 J	0.1 U	0.1 U	0.024 J	0.1 U	0.1 U	0.2 U	0.1 U	0.1 U
Bromide	mg/L	2.5 U	0.11 J	0.09 J											
Cadmium	mg/L	0.001 U	0.001 U	0.001 U									0.00029		0.001 U
Calcium	mg/L	160	160	160	150	160	150	150	150	150	160	140	170	140	150
Carbonate Alkalinity as CaCO3	mg/L					5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloride	mg/L	29	29	28	28	28	28	26	27	28	26	28	27	27 U	26
Chromium	mg/L	0.002 U	0.0049	0.0038									0.0097 J		0.005 U
Cobalt	mg/L	0.031	0.097	0.17									0.51		0.077
Conductivity, Field	uS/cm				1281				1221	1213	1212	1210	1251	1273	1307
Copper	mg/L	0.002 U	0.0045	0.002 U									0.005 U		
Dissolved Oxygen, Field	mg/L				1.61								0.31	0.26	0.37
Dissolved Solids, Total	mg/L	920 J	880	920 J	890		870	890	870	830	880	900	870	620	840
Fluoride	mg/L	0.12 J	0.13 J	0.12	0.12 J	0.11	0.25 U	0.11	0.12	0.12	0.11	0.13	0.13	0.11 U	0.072
Iron	mg/L	0.19	1.6	0.83									6.4		
Lead	mg/L	0.001 U	0.00053 J	0.001 U									0.0026 J		0.001 U
Lithium	mg/L	0.0096	0.0088	0.0088									0.0089 J		0.0096
Magnesium	mg/L	47	50	48	51	49	51	48	47	49	48	46	48	48	47
Manganese	mg/L	0.06	0.13	0.14									0.82		
Mercury	mg/L	0.0002 U	0.0002 U	0.0002 U									0.0002 U	0.0002 U	0.0002 U
Molybdenum	mg/L	0.0027 J	0.0031 J	0.0026 J									0.002 U		0.005 U
Nickel	mg/L	0.0019 J	0.0039	0.003									0.01		
Oxidation-Reduction Potential, Field	mV												-165.3	-282.3	-270.9
pH, Field	pH units	6.96	7.05	6.96	6.98	7.01	7.13	7.13	7.14	7.2	7.02	7.03	7.05	7.14	7.14
Potassium	mg/L	1.7	1.8	1.7	1.7	1.9	2	1.8	1.6	1.7	1.7	1.6	1.8	1.6	1.7
Radium-226	pCi/L	0.111	0.0957	0.0922									0.461	0.215	0.0396 U
Radium-226/228	pCi/L	0.201 U	0.331 U	0.3 U									1.1	0.427 U	0.782 U
Radium-228	pCi/L	0.0903 U	0.235 U	0.208 U									0.644	0.212 U	0.743 U
Redox Potential, Field	mV														
Selenium	mg/L	0.005 U	0.005 U	0.005 U									0.0015 J		0.005 U
Silver	mg/L	0.001 U	6.8E-05 J	0.001 U									0.00065 J		
Sodium	mg/L	64 B	68	68 JB	67	64	67	65	61	64	64	59	68	65 J	63
Strontium	mg/L	0.29	0.28 B	0.29									0.29		
Sulfate	mg/L	360	360	370	360	370	370	350	390	330	330	340	340	320	330
Temperature, Field	deg C				14.7				14	17	17	17	18	19.2	15.6
Thallium	mg/L	0.001 U	0.001 U	0.001 U									0.00042 J		0.001 U
Turbidity, Field	NTU	13.9	4.5	6.7	2.3	4.31		3	2.5	1.3	8.1	1.6	63.4	11.11	4.34
Vanadium	mg/L			0.005 U											
Zinc	mg/L	0.02 U	0.02 U	0.02 U									0.02 UJ		

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	94137	94137	94137	94137	94137	94137	94137	94137	94137	94139	94139	94139	94139	94139
	Date	2023-09-22	2023-09-22	2024-03-15	2024-03-15	2024-03-15	2024-09-27	2024-09-27	2025-03-07	2025-12-22	2016-08-23	2016-10-05	2016-12-02	2017-02-02	2017-03-29
	Sample Type	N	N	FD	N	N	N	N	N	N	N	N	N	N	N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L		350	350		360		350	350	380			563	555	
Aluminum	mg/L														1.1 J
Antimony	mg/L		0.002 U	0.002 U		0.002 U		0.00085	0.002 U	0.002 U	4E-05 J	3E-05 J	6E-05	3E-05 J	0.0017 J
Arsenic	mg/L		0.0049 J	0.0034 J		0.003 J		0.0026	0.0026 J	0.0061	0.00328	0.00322	0.00438	0.00317	0.0031 J
Barium	mg/L		0.053	0.045		0.042		0.05	0.045	0.062	0.0893	0.0852	0.0969	0.081	0.097 B
Beryllium	mg/L		0.001 U	0.001 U		0.001 U		0.001	0.001 U	0.00028 J	6.5E-05	2.7E-05	7.1E-05	2E-05 J	0.001 U
Bicarbonate Alkalinity as CaCO3	mg/L		350	350		360		350	350	380					
Bicarbonate Alkalinity as HCO3	mg/L														
Boron	mg/L		0.1 U	0.1 U		0.1 U		0.1	0.1 U	0.031	0.498	0.507	0.458	0.456	0.52
Bromide	mg/L												1.75	1.57	1.9 J
Cadmium	mg/L		0.001 U	0.001 U		0.001 U		0.0002	9.7E-05 J	0.00025 J	1E-05 J	1E-05 J	2E-05 U	6E-06 J	0.001 U
Calcium	mg/L		150	150		140		150	150	150	6.7	5.6	7.99	6.66	5.5 B
Carbonate Alkalinity as CaCO3	mg/L		5 U	5 U		5 U		5	5 U	5 U					
Chloride	mg/L		27	28		27		28	27	29	487	503	450	500	510
Chromium	mg/L		0.0078	0.013		0.015		0.0066	0.0046 J	0.0063	0.0008	0.0017	0.00236	0.000647	0.0017 J
Cobalt	mg/L		0.21	0.066		0.078		0.37	0.16	0.0058	0.000397	0.00031	0.000507	0.000159	0.00037 J
Conductivity, Field	uS/cm	1249			1283		1283		1172		2454	2630	2608	2726	
Copper	mg/L														0.0014 JB
Dissolved Oxygen, Field	mg/L	3.2			1.49		0.72		1.6		1.05	0.41	0.79	1.27	
Dissolved Solids, Total	mg/L		870	820		830		610	900	870	1420	1460	1390	1360	1500 J
Fluoride	mg/L		0.11	0.092		0.093		0.11	0.12	0.12	4.22	4.08	4.05	4.11	4.6
Iron	mg/L														0.62 JB
Lead	mg/L		0.001 U	0.001 U		0.001 U		0.001	0.001 U	0.0029	0.000963	0.00125	0.000921	0.000319	0.001 J
Lithium	mg/L		0.01 J	0.011		0.0096		0.01	0.0087	0.013	0.02	0.026	0.026	0.014	0.019
Magnesium	mg/L		50	47		44		52	48	49			2.44	2	1.9 B
Manganese	mg/L														0.026
Mercury	mg/L		0.0002 U	0.0002 U		0.0002 U		0.0002	0.0002 U	0.0002 U	5E-06 U	5E-06 U	1E-05	3E-06 J	0.0002 U
Molybdenum	mg/L		0.0021 J	0.0021 J		0.0022 J		0.0017	0.0027 J	0.0035 J	0.2	0.231	0.214	0.195	0.22
Nickel	mg/L														0.00089 J
Oxidation-Reduction Potential, Field	mV	-156.7			-149.7		-154.5		-67.5						
pH, Field	pH units	6.96			7.06		7.16		6.9		8.19	8.18	8.17	8.13	8.12
Potassium	mg/L		1.8	1.7		1.6		1.9	1.8	5.4			2.6	1.97	1.4 B
Radium-226	pCi/L		0.0754 U	0.21 J		-0.0337 UJ		0.0461 U	0.437		1.34	0.464	0.936	0.454	0.387
Radium-226/228	pCi/L		1	2.16 J		0.709 UJ		0.895	1.35 J		16.81	1.634	1.606	1.196	0.797
Radium-228	pCi/L		0.926	1.95		0.743 U		0.849	0.912 J		15.47	1.17	0.67	0.742	0.41 U
Redox Potential, Field	mV										-51.8	-191.2	-43.3	-102.6	
Selenium	mg/L		0.005 U	0.005 U		0.005 U		0.005	0.005 U	0.005 U	0.0002	0.0001	0.0002	3E-05 J	0.00089 J
Silver	mg/L														0.001 U
Sodium	mg/L		65	61		58		67	63	74			425	451	580 JB
Strontium	mg/L												0.453	0.395	0.4 B
Sulfate	mg/L		360	340		330		340	320	330	56.1	49	52.8	51	62 J
Temperature, Field	deg C	18.8			15.8		19.7		14		20.42	17.9	14.8	14.3	
Thallium	mg/L		0.001 U	0.001 U		0.001 U		0.001	0.001 U	0.001 U	5E-05 U	5E-05 U	2E-05 J	2E-05 J	0.001 U
Turbidity, Field	NTU	21.37			13.78		8.99		12.84		69.7	8.8	169.8	8.7	5
Vanadium	mg/L														
Zinc	mg/L														0.02 U

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	94139	94139	94139	94139	94139	94139	94139	94139	94139	94139	94139	94139	94139	94139
	Date	2017-04-28	2017-06-12	2017-06-12	2017-07-18	2018-03-15	2018-09-24	2019-03-11	2019-09-23	2020-03-19	2020-09-22	2021-03-25	2021-09-28	2022-03-28	2022-09-16
	Sample Type	N	FD	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L					510	500	500	490	520	500	500	500	490	490
Aluminum	mg/L	0.092	3.8 B	5.1 B	32									3.4	
Antimony	mg/L	0.002 U	0.002 U	0.002 U	0.002 U									0.002 U	
Arsenic	mg/L	0.0033 J	0.0047 J	0.0051	0.008									0.0036	
Barium	mg/L	0.092	0.11	0.12	0.29									0.13	
Beryllium	mg/L	0.001 U	0.001 U	0.00038 J	0.0015									0.00033 J	
Bicarbonate Alkalinity as CaCO3	mg/L					490	490		470	490	470	480	480	470	460
Bicarbonate Alkalinity as HCO3	mg/L							480							
Boron	mg/L	0.54 B	0.53	0.54	0.54 JB	0.51	0.5	0.54	0.51	0.51	0.51	0.55	0.53	0.52 J	0.52
Bromide	mg/L	1.8 J	1.8 J	1.8 J	1.8 J										
Cadmium	mg/L	0.001 U	0.001 U	0.001 U	0.00034 J									7.9E-05 J	
Calcium	mg/L	7.1	9.6	10	13	7.1	6.8	6.7	7.5	7.4	8.1	6.9	6.6	6.6	7.3
Carbonate Alkalinity as CaCO3	mg/L					15	13	17	19	27	24	27	22	18	26
Chloride	mg/L	510	480	480	520	500	560	500	480	560	560	480	520	490	520 J
Chromium	mg/L	0.002 U	0.0029	0.0052	0.014									0.0019 J	
Cobalt	mg/L	0.001 U	0.00062 J	0.00082 J	0.0035									0.00093	
Conductivity, Field	uS/cm					2550				2467	2493	2486	2473	2565	2613
Copper	mg/L	0.002 U	0.007 B	0.0063 B	0.019									0.0057 J	
Dissolved Oxygen, Field	mg/L					1.29								0.57	0.37
Dissolved Solids, Total	mg/L	1500 J	1400	1400	1400 J	1400	1400	1300	1300	1300	1400	1400	1500	1300 J	950
Fluoride	mg/L	4.7	5	5	5.1	4.4	4.6	4.4	4.7	4.6	4.6	4.5	4.8	4.5	4.9 J
Iron	mg/L	0.048 J	1.7	2.4	16									1.6	
Lead	mg/L	0.001 U	0.0025	0.004	0.029									0.0039 J	
Lithium	mg/L	0.019	0.018	0.019	0.024									0.019	
Magnesium	mg/L	2.1	3.2	3.4	7.5	2.3	2.1	2.3	2.9	2.3	2.9	2	1.9	2.4	2.4
Manganese	mg/L	0.017	0.023	0.033	0.28									0.042	
Mercury	mg/L	0.0002 U	0.0002 U	0.0002 UJ	0.0002 U									0.0002 U	0.0002 U
Molybdenum	mg/L	0.21	0.19 J	0.2 J	0.19									0.16	
Nickel	mg/L	0.002 U	0.0025	0.0027	0.013									0.0039 J	
Oxidation-Reduction Potential, Field	mV													-11.5	-66.7
pH, Field	pH units	8.14		8.01	7.92	8.19	8.17	8.37	8.36	8.35	8.22	8.22	8.28	8.34	8.2
Potassium	mg/L	1.4	1.5	1.6	2.4	1.4	1.4	1.4	1.6	1.3	1.5	1.4	1.4	1.5	1.6
Radium-226	pCi/L	0.547	0.559	0.61	0.886 J									0.874	0.464
Radium-226/228	pCi/L	0.907	1.12	0.971	2.21									1.57	1.37
Radium-228	pCi/L	0.36 U	0.565	0.361 U	1.32									0.693 U	0.902 U
Redox Potential, Field	mV														
Selenium	mg/L	0.005 U	0.005 U	0.00091 J	0.0029 J									0.005 U	
Silver	mg/L	0.001 U	0.001 U	0.001 U	0.00019 J									0.001 U	
Sodium	mg/L	570	530	550	560 JB	550	590	560	510	550	520	550	570	560	550
Strontium	mg/L	0.46	0.48 B	0.51 B	0.75									0.48	
Sulfate	mg/L	62	70	69	66	65	74	66	60	62	59	59	61	57	63 J
Temperature, Field	deg C					15.7				16	17	15	18	14	19.1
Thallium	mg/L	0.001 U	0.001 U	0.001 U	0.001 U									0.001 U	
Turbidity, Field	NTU	5.9		90.8	69.3	22	10.8		34	7.4	309	9.8	4.9	50.3	53.7
Vanadium	mg/L				0.0079										
Zinc	mg/L	0.02 U	0.02 U	0.02 U	0.081									0.02 U	

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	94139	94139	94139	94139	94139	94139	94139	94139	94139	94139	96152	96152	96152	96152
	Date	2023-03-31	2023-09-26	2023-09-26	2024-03-18	2024-03-18	2024-09-20	2024-09-20	2025-03-27	2025-09-19	2025-09-19	2019-03-28	2019-09-22	2020-03-26	2020-09-17
	Sample Type	N	N	N	N	N	N	N	N	FD	N	N	N	N	N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L	490		510		530		500	490	490	490	450	450	470	550
Aluminum	mg/L														
Antimony	mg/L	0.002 U		0.0006 J		0.002 U		0.002	0.002 U	0.002 U	0.002 U				
Arsenic	mg/L	0.0042 J		0.0079		0.0037 J		0.0049	0.0055	0.0039 J	0.0044 J				
Barium	mg/L	0.1		0.16		0.1		0.11	0.19	0.091	0.093				
Beryllium	mg/L	0.001 U		0.001 U		0.001 U		0.001	0.00077 J	0.001 U	0.00041 J				
Bicarbonate Alkalinity as CaCO3	mg/L	460		490		500		480	470	460	450	450	450	470	550
Bicarbonate Alkalinity as HCO3	mg/L														
Boron	mg/L	0.51		0.52		0.45		0.49	0.55	0.57 J	0.56 J	0.43	0.41	0.43	0.43
Bromide	mg/L														
Cadmium	mg/L	0.001 U		0.0002 J		0.001 U		0.00013	0.00011 J	0.001 U	0.00013 J				
Calcium	mg/L	7.1		13		8.9		8.6	12	7.6	7.6	85	61	64	50
Carbonate Alkalinity as CaCO3	mg/L	27		21		23		24	26	31	33	5 U	5 U	5 U	5 U
Chloride	mg/L	490		510		480		500	470	510	500	4900	4300	4800	3400
Chromium	mg/L	0.0044 J		0.0086		0.0019 J		0.014	0.087	0.0046 J	0.0054				
Cobalt	mg/L	0.00082 J		0.0031		0.0007 J		0.00095	0.25	0.0026	0.003				
Conductivity, Field	uS/cm	2624	2543		2635		2551		2509		2600			12690	10609
Copper	mg/L														
Dissolved Oxygen, Field	mg/L	0.53	0.8		1.98		0.49		0.89		0.15				
Dissolved Solids, Total	mg/L	1300		1300		1300		1400	1500	1300	1300	6400	6200	6600	4500
Fluoride	mg/L	4.6		4.7		4.7		4.9	4.2	4.3	4.3	0.84	0.91	0.86	0.97
Iron	mg/L														
Lead	mg/L	0.0022		0.02		0.0036		0.0013	0.0075	0.00075 J	0.00086 J				
Lithium	mg/L	0.018		0.021		0.019		0.018	0.025	0.019	0.019				
Magnesium	mg/L	2.6		4.1		2.8		2.6	5	2.4	2.5	28	24	23	17
Manganese	mg/L														
Mercury	mg/L	0.0002 U		0.0002 U		0.0002 U		0.0002	0.0002 U	0.0002 U	0.0002 U				
Molybdenum	mg/L	0.19		0.19		0.18		0.19	0.2	0.19	0.19				
Nickel	mg/L														
Oxidation-Reduction Potential, Field	mV	41.8	48.9		123.2		-45.8		84.8		-79.6				
pH, Field	pH units	8.26	8.24		8.23		8.44		8.1		8.38	7.71	7.55	7.75	7.68
Potassium	mg/L	1.5		2.4		1.4		2	2.7	1.5	1.6	14	11	11	9.3
Radium-226	pCi/L	0.532		0.551 U		0.409		0.3	0.24 U	0.503 J	0.52 J				
Radium-226/228	pCi/L	1.56		2.52		1.88		0.629 U	1.41 U	1.15 U	0.674 U				
Radium-228	pCi/L	1.03 U		1.97		1.47		0.329 U G	1.17 U	0.652 U	0.155 U				
Redox Potential, Field	mV														
Selenium	mg/L	0.005 U		0.005 U		0.005 U		0.005	0.005 U	0.005 U	0.005 U				
Silver	mg/L														
Sodium	mg/L	520		570		520		570	560	540	550	2800	2500	2500	2100
Strontium	mg/L														
Sulfate	mg/L	58		60		62		64	58	59	59	19	16	20	28
Temperature, Field	deg C	14.7	17.5		16.2		22		14.8		19.4			15	14
Thallium	mg/L	0.001 U		0.00034 J		0.001 U		0.001	0.001 U	0.001 U	0.00051 J				
Turbidity, Field	NTU	31.04	62.09		36.4		22.19		220.81		28.03		252	230	76.1
Vanadium	mg/L														
Zinc	mg/L														

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
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Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	96152	96152	96152	96152	96152	96152	96152	96152	96152	96152	96152	96152	96152	96152
	Date	2021-03-10	2021-09-29	2022-03-31	2022-05-10	2022-07-20	2022-08-16	2022-08-16	2022-09-14	2022-10-21	2022-10-21	2022-12-06	2023-02-23	2023-02-23	2023-03-28
	Sample Type	N	N	N	N	N	FD	N	N	N	N	N	FD	N	N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L	560	590	600	470	590	480	480	500	510	510	500	470	470	520
Aluminum	mg/L			2.7											
Antimony	mg/L			0.002 U	0.002 U	0.002 U	0.002 U	0.002 U			0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Arsenic	mg/L			0.024	0.0022 J	0.0092	0.0054	0.0054			0.004 J	0.0068	0.0061	0.0061	0.0034 J
Barium	mg/L			0.49	0.51	0.83	0.66	0.69			0.68	0.7	0.63	0.62	0.68
Beryllium	mg/L			0.001 U	0.001 U	0.001 U	0.001 U	0.001 U			0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Bicarbonate Alkalinity as CaCO3	mg/L	560	590	600	470	590	480	480	500	510	510	500	470	470	520
Bicarbonate Alkalinity as HCO3	mg/L														
Boron	mg/L	0.45	0.48	1.2 U	0.45				0.48						0.45
Bromide	mg/L														
Cadmium	mg/L			0.0001 U	0.001 U	0.001 U	0.001 U	0.001 U			0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Calcium	mg/L	43	41	54	49				46						45
Carbonate Alkalinity as CaCO3	mg/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloride	mg/L	3200	3100	3000	3500				3200	3300					3400
Chromium	mg/L			0.0093	0.005 U	0.005 U	0.0027 J	0.003 J			0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Cobalt	mg/L			0.008	0.002	0.003	0.0025	0.0025			0.0019	0.003	0.0027	0.0026	0.0023
Conductivity, Field	uS/cm	10275	4382	10560	9762	10590	10594	10594	10779	10518		10407		10513	9837
Copper	mg/L			0.012 J											
Dissolved Oxygen, Field	mg/L			1.24	0.36	0.67	0.52	0.52	0.65	0.59		0.65		2.11	0.69
Dissolved Solids, Total	mg/L	5100	5000	4900	5000				4500 J	5200					5500
Fluoride	mg/L	0.72	1	0.85	0.91	0.77 J	0.78	0.72 J	0.78 J	0.72	0.89	0.89	0.9 J	0.91 J	0.56
Iron	mg/L			7.3											
Lead	mg/L			0.0059 J	0.001 U	0.00051 J	0.001 U	0.00045 J			0.001 U	0.001 U	0.001 U	0.001 U	0.0005 J
Lithium	mg/L			0.098	0.069	0.083	0.088	0.091			0.084	0.078	0.085	0.084	0.076
Magnesium	mg/L	16	14	19	16	16	16	17	15		16	15	15	15	15
Manganese	mg/L			0.53											
Mercury	mg/L			0.0002 U	0.00015 J	0.0002 U	0.0002 U	0.0002 U	0.0002 U		0.0002 U	0.0002 UF1	0.0002 U	0.0002 U	0.0002 U
Molybdenum	mg/L			0.002 U	0.0032 J	0.0038 J	0.0037 J	0.004 J			0.004 J	0.0036 J	0.0035 J	0.0035 J	0.0036 J
Nickel	mg/L			0.017											
Oxidation-Reduction Potential, Field	mV			187.5	-110.9	-195.1	-109.4	-109.4	-141.2	-100.9		-101.2		-89.9	-102.7
pH, Field	pH units	7.56	7.39	7.41	7.16	7.53	7.33	7.33	7.29	7.21		7.35		7.42	7.36
Potassium	mg/L	8.9	8.4	9 J	8.3	8.3	8.1	8.4	8.2		8.6	7.9	8.2	8.1	8.2
Radium-226	pCi/L			3.74	1.14	2.33	1.49	1.09	1.92		1.46	1.63	1.51	1.46	1.58
Radium-226/228	pCi/L			5.19	2.75	5.15	3.53	3.49	4.24 J		3.71	3.51	3.06	4.1	3.84
Radium-228	pCi/L			1.45 U	1.61	2.81	2.04	2.4	2.32 J		2.25	1.88	1.55	2.64	2.26
Redox Potential, Field	mV														
Selenium	mg/L			0.0015 J	0.005 U	0.005 U	0.005 U	0.005 U			0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Silver	mg/L			0.00064 J											
Sodium	mg/L	2000	2000	2300	2100	2200	2200	2300	2100		2200	2100	2100	2100	2000
Strontium	mg/L			3.1											
Sulfate	mg/L	27	66	92	43				49	42					61
Temperature, Field	deg C	13	13	13	12.7	14.5	13.5	13.5	13.3	13.2		12.4		13.8	11.8
Thallium	mg/L			0.001 U	0.001 U	0.001 U	0.001 U	0.0017 J			0.00072 J	0.001 U	0.001 U	0.001 U	0.001 U
Turbidity, Field	NTU	159	56.6	536.5	16.33	19.03	15.01	15.01	9	9.21		23.12		5.26	27.54
Vanadium	mg/L														
Zinc	mg/L			0.02											

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

		Location	96152	96152	96152	96152	96152	96152	96152	96152	96152	96152	96152	96152	96153R
		Date	2023-04-14	2023-04-14	2023-09-15	2023-09-15	2024-03-08	2024-03-08	2024-03-08	2024-09-13	2024-09-13	2025-03-13	2025-03-13	2025-10-02	2025-10-02	2016-08-23
		Sample Type	FD	N	N	N	FD	N	N	N	N	FD	N	FD	N	N
Analyte	Unit															
Alkalinity, Total as CaCO3	mg/L		540	520		550	530		530		530	500	500	480	480	
Aluminum	mg/L															
Antimony	mg/L		0.0011 J	0.00081 J		0.0007 J	0.002 U		0.002 U		0.002	0.002 U	0.002 U	0.002 U	0.002 U	0.00059
Arsenic	mg/L		0.013	0.011		0.018	0.0082		0.0079		0.013	0.008	0.0079	0.0085	0.0084	0.00237
Barium	mg/L		0.9	0.84		0.66	0.54		0.52		0.73	0.79	0.81	0.84	0.86	0.0315
Beryllium	mg/L		0.0013	0.00089 J		0.001 U	0.001 U		0.001 U		0.001	0.001 U	0.001 U	0.001 U	0.001 U	0.000515
Bicarbonate Alkalinity as CaCO3	mg/L		540	520		550	530		530		530	500	500	480	480	
Bicarbonate Alkalinity as HCO3	mg/L															
Boron	mg/L					0.44	0.48		0.46		0.46	0.45	0.45	0.45 J	0.45 J	0.448
Bromide	mg/L															
Cadmium	mg/L		0.0002 J	0.001 U		0.001 U	0.001 U		0.001 U		0.001	0.001 U	0.001 U	0.001 U	8.9E-05 J	8E-05
Calcium	mg/L					42	45		43		46	46	46	49	49	189
Carbonate Alkalinity as CaCO3	mg/L		5 U	5 U		5 U	5 U		5 U		5	5 U	5 U	5 U	5 U	
Chloride	mg/L					3300	3200		3200		3200	3600	3700	3500	3500	34.3
Chromium	mg/L		0.016	0.013		0.0027 J	0.0035 J		0.003 J		0.005	0.005 U	0.005 U	0.0063	0.0076	0.0034
Cobalt	mg/L		0.0067	0.0057		0.0033	0.0027		0.0025		0.0027	0.0022	0.0022	0.0034	0.0035	0.0234
Conductivity, Field	uS/cm				9399			10661		10626			10761		10670	3013
Copper	mg/L															
Dissolved Oxygen, Field	mg/L				1.13			1.78		1.1			0.81		0.53	4.65
Dissolved Solids, Total	mg/L					5300	5200		5200		4300	5700	5600	5600	5800	2300
Fluoride	mg/L		0.8	0.8		0.82	0.76		0.75		0.65	0.85	0.89	0.94 J	0.91 J	0.8
Iron	mg/L															
Lead	mg/L		0.0055	0.0047		0.001	0.00056 J		0.0005 J		0.001	0.001 U	0.001 U	0.0019	0.0021	0.00648
Lithium	mg/L		0.092	0.091		0.089	0.085		0.081		0.086	0.084	0.086	0.083	0.086	0.096
Magnesium	mg/L		15	15		15	16		15		16	16	16	16	16	
Manganese	mg/L															
Mercury	mg/L		0.0002 U	0.0002 U		0.0002 U	0.0002 U		0.0002 U		0.0002	0.0002 U	0.0002 U	0.0002 U	0.0002 U	8E-06
Molybdenum	mg/L		0.0051	0.0044 J		0.0043 J	0.0037 J		0.0033 J		0.0042	0.0039 J	0.0039 J	0.0038 J	0.0046 J	0.0126
Nickel	mg/L															
Oxidation-Reduction Potential, Field	mV				-114.9			-145.7		-156.7			-113		-177.5	
pH, Field	pH units				7.68			7.32		7.42			7.51		7.42	7.18
Potassium	mg/L		9.3	8.7		9	8.6		8.4		8.8	8.7	8.7	8.8	8.9	
Radium-226	pCi/L		1.81	1.42		2.24	1.38 J		1.06 J		1.28	1.15	1.43	1.8 J	1.54 J	0.634
Radium-226/228	pCi/L		3.99	3.26		5.05 J	3.66 J		3.84 J		3.84	3.04	3.96	3.93 J	3.96 J	2.434
Radium-228	pCi/L		2.18	1.84		2.8 J	2.28		2.78		2.55	1.89	2.53	2.13	2.42	1.8
Redox Potential, Field	mV															36.1
Selenium	mg/L		0.00091 J	0.005 U		0.001 J	0.005 U		0.005 U		0.005	0.005 U	0.005 U	0.005 U	0.005 U	0.0009
Silver	mg/L															
Sodium	mg/L		2000	2000		2200	2100		2100		2200	2200	2200	2200	2300	
Strontium	mg/L															
Sulfate	mg/L					78	75		71		65	56	57	59 J	58 J	1290
Temperature, Field	deg C				13.6			12.8		15.6			12.8		14.3	14.3
Thallium	mg/L		0.00079 J	0.00068 J		0.00058 J	0.001 U		0.001 U		0.001	0.001 U	0.001 U	0.001 U	0.001 U	5E-05 J
Turbidity, Field	NTU				44.01			31.14		14.27			5.84		54.32	141.2
Vanadium	mg/L															
Zinc	mg/L															

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

		Location	96153R	96153R	96153R	96153R	96153R	96153R	96153R	96153R	96153R	96153R	96153R	96153R	96153R	96153R
		Date	2016-10-03	2016-11-29	2017-03-21	2017-04-25	2017-06-06	2017-07-12	2018-03-22	2018-09-13	2019-03-29	2019-09-19	2020-03-15	2020-03-24	2020-09-15	2021-03-19
		Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Unit															
Alkalinity, Total as CaCO3	mg/L		262	84					71	140	5 U	280	270	230	260	
Aluminum	mg/L				0.56	0.47	0.085 B									
Antimony	mg/L	0.00036	0.00024	0.00085 J	0.002 U	0.00057 J	0.002 U		0.002 U							
Arsenic	mg/L	0.00142	0.0013	0.0044 J	0.005 U	0.005 U	0.005 U		0.005 U							
Barium	mg/L	0.0901	0.136	0.061 JB	0.027	0.037	0.03		0.028							
Beryllium	mg/L	0.000196	0.00019	0.012	0.0048	0.00038 J	0.001 U		0.0052							
Bicarbonate Alkalinity as CaCO3	mg/L								71	140	5 U	280	270	230	260	
Bicarbonate Alkalinity as HCO3	mg/L															
Boron	mg/L	0.423	0.463	0.23	0.25	0.48 B	0.48 B		0.32	0.39	0.18	0.54	0.51	0.5	0.58	
Bromide	mg/L		0.2 U	5 U	5 U	5 U	5 U									
Cadmium	mg/L	0.0001	2E-05 J	0.00036 J	0.00024 J	0.001 U	0.001 U		0.00027 J							
Calcium	mg/L	208	177	210 B	200	72	130		150	150	160	92	120	140	120	
Carbonate Alkalinity as CaCO3	mg/L								5 U	5 U	5 U	5 U	5 U	5 U	5 U	
Chloride	mg/L	16.1	11.6	16	20	35	19		19	21	20	31	14	15	13	
Chromium	mg/L	0.0027	0.00261	0.0028 J	0.002 U	0.002 U	0.002 U		0.002 U							
Cobalt	mg/L	0.0266	0.00693	0.3	0.29	0.012	0.0063		0.2							
Conductivity, Field	uS/cm	2934	2473					2256				2396	2274	2131	2165	
Copper	mg/L				0.002 U	0.002 U	0.0034									
Dissolved Oxygen, Field	mg/L	3.74	1.71					0.12								
Dissolved Solids, Total	mg/L	2160	1700	1800	1900 J	1800	1600 J		1600	1500	1600	1500 J	1700	1500	1500	
Fluoride	mg/L	0.72	0.67	2.3	2.3	1.4	1.2		1.4	1.1	2.6	1.2	1	0.81	0.87	
Iron	mg/L				30	0.94	0.14									
Lead	mg/L	0.00278	0.00277	0.0014 J	0.001 U	0.00045 J	0.001 U		0.001 U							
Lithium	mg/L	0.081	0.053	0.18	0.2	0.069	0.054		0.16							
Magnesium	mg/L		33.6		73	17	26			53	69	19	23	28	23	
Manganese	mg/L			18 B	17	1.6	0.99									
Mercury	mg/L	2E-06 J	1.5E-05	0.0002 U	0.0002 U	0.0002 U	0.0002 U		0.0002 U							
Molybdenum	mg/L	0.0114	0.00812	0.0065 J	0.0042 J	0.02	0.0068 J		0.003 J							
Nickel	mg/L				0.27	0.018	0.0061									
Oxidation-Reduction Potential, Field	mV															
pH, Field	pH units	6.99	7.35	6.46	6.19	7.2	7.49	7.14	6.04	6.59	5.31	7.42	7.36	7.23	7.4	
Potassium	mg/L		6.7	10 JB	11	5.3	5.8			15	11	5.5	5.8	6	5.5	
Radium-226	pCi/L	0.403	0.968	0.476	0.475	0.335	0.05 U		0.328							
Radium-226/228	pCi/L	1.963	1.64	0.764	0.926	0.607	0.702		0.72							
Radium-228	pCi/L	1.56	0.672	0.288 U	0.451	0.272 U	0.652 J		0.393 U							
Redox Potential, Field	mV	136.7	227.2													
Selenium	mg/L	0.0005	0.0006	0.0053 J	0.0017 J	0.0014 J	0.001 JB		0.005 U							
Silver	mg/L				0.001 U	0.001 U	0.001 U									
Sodium	mg/L		287	160 JB	190	490 B	330			280	150	420	350	330	320	
Strontium	mg/L		3.22	1.5 JB	1.4	1.3 B	2.6									
Sulfate	mg/L	1320	973	1200	1700	1000	1000		1100	1100	1100	1200	1100	910	900	
Temperature, Field	deg C	14.6	13.3					12.2				13	13	14	12	
Thallium	mg/L	8E-05 J	2E-05 J	0.001 U	0.001 U	0.001 U	0.001 U		0.001 U							
Turbidity, Field	NTU	65	49.6	113.6	87.4	19.2	30.7	7	69.4		85	4	10.5	9.8	2.9	
Vanadium	mg/L															
Zinc	mg/L				0.61	0.018 J	0.02 U									

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	96153R	96153R	96153R	96153R	96153R	96153R	96153R	96153R	96153R	96153R	96154R	96154R	96154R
	Date	2021-09-20	2022-03-30	2022-09-13	2022-10-25	2023-03-27	2023-09-14	2023-09-14	2024-03-08	2024-03-08	2024-09-30	2024-09-30	2016-08-23	2016-10-03	2016-11-29
	Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L	350	250	260	250	260		260		270		220			558
Aluminum	mg/L		0.31												
Antimony	mg/L		0.00071 J			0.002 U		0.002 U		0.00077 J		0.002	0.00091	0.00098	0.00046
Arsenic	mg/L		0.002 U			0.005 U		0.005 U		0.00086 J		0.005	0.00644	0.00668	0.00409
Barium	mg/L		0.022			0.023		0.032		0.028		0.023	0.13	0.115	0.219
Beryllium	mg/L		0.00031 J			0.001 U		0.001 U		0.0014		0.001	0.000546	0.000319	0.000679
Bicarbonate Alkalinity as CaCO3	mg/L	120	250	260	250	260		260		270		220			
Bicarbonate Alkalinity as HCO3	mg/L														
Boron	mg/L	0.51	0.58 J	0.55		0.56		0.54		0.56		0.54	0.441	0.395	0.504
Bromide	mg/L														1.48
Cadmium	mg/L		0.0001 U			0.001 U		0.001 U		0.001 U		0.001	5E-05	2E-05	4E-05
Calcium	mg/L	120	59	120		120		130		110		130	9.41	5.34	10.5
Carbonate Alkalinity as CaCO3	mg/L	230	5 U	5 U	5 U	5 U		5 U		5 U		5			
Chloride	mg/L	11	17	10	13	8.4 J		11		19		17	413	452	410
Chromium	mg/L		0.005 U			0.005 U		0.005 U		0.0014 J		0.0013	0.0022	0.0057	0.0121
Cobalt	mg/L		0.0013			0.00023 J		0.0006 J		0.0019		0.00015	0.00204	0.00176	0.00443
Conductivity, Field	uS/cm	2104	2783	2297	2021	2141	1960		2258		2089		2462	2602	2562
Copper	mg/L		0.005 U												
Dissolved Oxygen, Field	mg/L		0.61	2.65	8.73	2.94	3.51		2.67		3.05		0.68	0.59	1.16
Dissolved Solids, Total	mg/L	1500	140 J	1300 J	1300	1400		1400		1400		1400	1940	1550	1850
Fluoride	mg/L	0.8	0.83	0.75 J	0.87	0.71 J		0.6		0.74		0.74	3.32	3.36	3.4
Iron	mg/L		0.87												
Lead	mg/L		0.0005 U			0.001 U		0.001 U		0.001 U		0.001	0.00565	0.00371	0.00967
Lithium	mg/L		0.036 J			0.043		0.045		0.043		0.044	0.08	0.054	0.04
Magnesium	mg/L	23	11	23		23		24		22		22			4.24
Manganese	mg/L		0.13												
Mercury	mg/L		0.0002 U	0.0002 U		0.0002 U		0.0002 U		0.0002 U		0.0002	2.5E-05	1E-05	3E-05
Molybdenum	mg/L		0.012			0.0045 J		0.0043 J		0.0035 J		0.0039	0.0557	0.102	0.0724
Nickel	mg/L		0.0019 J												
Oxidation-Reduction Potential, Field	mV		128.8	46.5	193	71.9	136.3		95.9		76.5				
pH, Field	pH units	7.41	7.62	7.37	7.63	7.57	6.88		7.42		7.48		9.5	9.36	8.67
Potassium	mg/L	5.8	3.8 J	5.8		5.9		6.5		5.6		5.7			7.64
Radium-226	pCi/L		0.1 U	0.279		0.0823 U		0.306		0.192 U		0.131 U	1.21	0.53	1.68
Radium-226/228	pCi/L		0.28 U	1.12		0.242 U		1.44		0.857		0.589	1.566	1.434	2.328
Radium-228	pCi/L		0.18 U	0.845		0.159 U		1.14		0.664		0.457 U	0.356	0.904	0.648
Redox Potential, Field	mV												97.1	54.8	175.9
Selenium	mg/L		0.005 U			0.005 U		0.005 U		0.005 U		0.005	0.001	0.001	0.002
Silver	mg/L		0.001 U												
Sodium	mg/L	320	510	310		320		310		350		300			478
Strontium	mg/L		1.4												0.425
Sulfate	mg/L	950	880	930	900	880 J		890		860		820	99.2	87.4	125
Temperature, Field	deg C	14	12	14.4	13.9	13.5	14.2		12.8		15.5		16.5	14.4	13.3
Thallium	mg/L		0.001 U			0.001 U		0.001 U		0.001 U		0.001	6.4E-05	0.000144	0.000121
Turbidity, Field	NTU	7.7	14.2	9.92	81.21	9.4	15.14		35.94		3.85		737	209.7	642.7
Vanadium	mg/L														
Zinc	mg/L		0.02 U												

Notes:
FD = Field duplicate sample
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deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
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Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	96154R	96154R	96154R	96154R	96154R	96154R	96154R	96154R	96154R	96154R	96154R	96154R	96154R
	Date	2017-01-30	2017-03-21	2017-04-25	2017-06-06	2017-07-12	2018-03-22	2018-09-13	2019-03-29	2019-03-29	2019-09-19	2020-03-12	2020-09-14	2021-03-19	2021-09-20
	Sample Type	N	N	N	N	N	N	N	FD	N	N	N	N	N	N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L	607	600					460	350	350	280	560	530	570	550 J
Aluminum	mg/L			0.42	1.4	0.96 B									
Antimony	mg/L	0.00078	0.0014 J	0.0014 J	0.002 U	0.0006 JB									
Arsenic	mg/L	0.00277	0.0049 J	0.0093	0.0022 J	0.0025 J									
Barium	mg/L	0.194	0.28 JB	0.067	0.12	0.11									
Beryllium	mg/L	0.000166	0.001 U	0.001 U	0.001 UJ	0.001 U									
Bicarbonate Alkalinity as CaCO3	mg/L							110	5 U	5 U	5 U	280	470	410	500 J
Bicarbonate Alkalinity as HCO3	mg/L														
Boron	mg/L	0.454	0.49	0.5	0.53 B	0.53 B			0.38	0.38	0.39	0.43	0.45	0.51	0.53
Bromide	mg/L	1.36	1.5 J	1.4 J	2.4	1.8 J									
Cadmium	mg/L	4E-05	0.001 U	0.001 U	0.001 U	0.001 U									
Calcium	mg/L	22.1	31 B	2.1	4.8	4.3		3.2	61	61	26	17	7	8.3	14
Carbonate Alkalinity as CaCO3	mg/L							350	130	130	180	280	58	160	48 J
Chloride	mg/L	446	410	410	470	490		410	340	330	350	490	470	370	520
Chromium	mg/L	0.00249	0.0051 J	0.002 U	0.0078 J	0.0013 J									
Cobalt	mg/L	0.000799	0.00095 J	0.00037 J	0.00042 J	0.00022 J									
Conductivity, Field	uS/cm	2549					2650					2483	2545	2551	2567
Copper	mg/L			0.002 U	0.0043 B	0.002 U									
Dissolved Oxygen, Field	mg/L	1.02					0.15								
Dissolved Solids, Total	mg/L	1590	1400	1400 J	1500	1500 J			860	850	900	1400	1400	1400	1300
Fluoride	mg/L	3.33	4.2	4.5	4.1	4.5		4.4	3.3	3.3	3.9	4	4.2	3.8	4.4
Iron	mg/L			0.29	1.4	0.64									
Lead	mg/L	0.0031	0.0021 J	0.001 U	0.00077 J	0.00048 J									
Lithium	mg/L	0.137	0.24	0.19	0.048	0.049									
Magnesium	mg/L	1.48		0.55 J	1.5	1.4		0.51 J	0.34 J	0.41 J	0.24 J	1.5	1.3	1.2	1.5
Manganese	mg/L		0.02 B	0.011	0.013	0.0053									
Mercury	mg/L	1.8E-05	0.0002 U	0.0002 U	0.0002 U	0.0002 U									
Molybdenum	mg/L	0.0692	0.09 J	0.093	0.1	0.1									
Nickel	mg/L			0.002 U	0.0028	0.002 U									
Oxidation-Reduction Potential, Field	mV														
pH, Field	pH units	9.64	10.67	10.32	8.76	8.82	9.85	10.11		12.06	11.7	9.76	8.93	9.18	8.57
Potassium	mg/L	33.8	58 JB	41	6	6.1		12	20	20	10	7.2	3.6	4.4	3.8
Radium-226	pCi/L	0.96	0.696	0.664	0.251	0.213									
Radium-226/228	pCi/L	1.762	1.21	0.894	0.655	0.577									
Radium-228	pCi/L	0.802	0.51	0.23 U	0.405	0.364 UJ									
Redox Potential, Field	mV	139.8													
Selenium	mg/L	0.0006	0.00096 J	0.005 U	0.005 U	0.005 U									
Silver	mg/L			0.001 U	0.0017	0.00021 J									
Sodium	mg/L	449	540 JB	510	540 B	590		450	340	340	320	520	500	530	570
Strontium	mg/L	1.37	2.6 JB	0.57	0.36 B	0.38									
Sulfate	mg/L	66.8	64	60	100	100		42	29	29	33	33	36	36	41
Temperature, Field	deg C	11.2					12.6					13	14	13	14
Thallium	mg/L	0.000114	0.001 U	0.001 U	0.001 U	0.001 U									
Turbidity, Field	NTU	349.1	98.6	63.9	44.8	16.2	6	6.23			41	140	87.9	53.9	59.9
Vanadium	mg/L														
Zinc	mg/L			0.02 U	0.02 U	0.02 U									

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

		Location	96154R	96154R	96154R	96154R	96154R	96154R	96154R	96154R	96154R	96154R	96154R	96154R	96154R
		Date	2022-03-30	2022-09-14	2022-10-19	2023-03-27	2023-03-27	2023-09-14	2023-09-14	2024-03-06	2024-03-06	2024-03-06	2024-09-26	2024-09-26	2024-09-26	2025-03-17
		Sample Type	N	N	N	FD	N	N	N	FD	N	N	FD	N	N	N
Analyte	Unit															
Alkalinity, Total as CaCO3	mg/L		550	520	510	600	600		560	600		610	450		450	480
Aluminum	mg/L		0.4													
Antimony	mg/L		0.002 U			0.00066 J	0.00077 J		0.002 U	0.00061 J		0.002 U	0.00058		0.00062	0.00064 J
Arsenic	mg/L		0.0023			0.0043 J	0.0044 J		0.0029 J	0.003 J		0.0033 J	0.0063		0.0064	0.0025 J
Barium	mg/L		0.16			0.38	0.39		0.19	0.46		0.47	0.1		0.11	0.67
Beryllium	mg/L		0.001 U			0.001 U	0.001 U		0.001 U	0.001 U		0.001 U	0.001		0.001	0.001 U
Bicarbonate Alkalinity as CaCO3	mg/L		440	460	450	280	280		510	65		75	340		290	5 U
Bicarbonate Alkalinity as HCO3	mg/L															
Boron	mg/L		0.61 J	0.48		0.48	0.48		0.53	0.46		0.45	0.39		0.4	0.27
Bromide	mg/L															
Cadmium	mg/L		0.0001 U			0.001 U	0.001 U		0.001 U	0.001 U		0.001 U	9E-05		8.8E-05	0.001 U
Calcium	mg/L		11	35		62	65		9.6	100		100	3.7		3.8	200
Carbonate Alkalinity as CaCO3	mg/L		110	57	63	320	320		52	530		530	110		160	16
Chloride	mg/L		490	430	440	450	460		560	480		430	480		480	290
Chromium	mg/L		0.005 U			0.0062	0.0061		0.011	0.0027 J		0.0025 J	0.0015		0.0017	0.0012 J
Cobalt	mg/L		0.0002 J			0.0013	0.0013		0.0024	0.00061 J		0.00054 J	0.00026		0.00033	0.00035 J
Conductivity, Field	uS/cm		2802	2529	2529		2720	2602			2806			2576		4137
Copper	mg/L		0.005 U													
Dissolved Oxygen, Field	mg/L		0.84	0.51	0.65		0.69	2.84			1.93			2.25		4.48
Dissolved Solids, Total	mg/L		1400	1200	1500	1400	1400		1500	1300		1300	1300		1200	1000
Fluoride	mg/L		4.4	4.2	4.1	4.2	4.2		4.2	3.7		3.8	4.2		3.9	2.3
Iron	mg/L		0.33 J													
Lead	mg/L		0.0005 U			0.002	0.0019		0.0028	0.0012		0.001	0.001		0.001	0.00047 J
Lithium	mg/L		0.036 J			0.065	0.067		0.041	0.066		0.065	0.052		0.054	0.17
Magnesium	mg/L		1.3	12		1.8	1.8		2.6	1.2		1.2	0.84		0.89	0.3 J
Manganese	mg/L		0.0046 J													
Mercury	mg/L		0.0002 U	0.0002 U		0.0002 U	0.0002 U		0.0002 U	0.0002 U		0.0002 U	0.0002		0.0002	0.0002 U
Molybdenum	mg/L		0.1			0.11	0.11		0.11	0.11		0.1	0.1		0.11	0.062
Nickel	mg/L		0.005 U													
Oxidation-Reduction Potential, Field	mV		40.2	-19.5	148		24.1	160.5			113.4			16.9		-26.7
pH, Field	pH units		8.97	8.62	8.38		9.95	8.19			9.97			9.22		12.39
Potassium	mg/L		4 J	14		7.6	7.9		5.7	9.7		9.4	3.7		3.8	22
Radium-226	pCi/L		0.296	1.39		0.937	1.39		0.506 U	2.3		2.46	0.355		0.228 U	1.63
Radium-226/228	pCi/L		0.557	2.53 J		1.4	2.78		7.18	3.27		2.87	0.664		1.58	1.98
Radium-228	pCi/L		0.26 U	1.14 J		0.467 U	1.39		6.67	0.973		0.417 U	0.308 U		1.36	0.349 U
Redox Potential, Field	mV															
Selenium	mg/L		0.0011 J			0.005 U	0.005 U		0.005 U	0.005 U		0.005 U	0.005		0.005	0.005 U
Silver	mg/L		0.001 U													
Sodium	mg/L		600	500		550	560		600	540		520	530		550	310
Strontium	mg/L		0.53													
Sulfate	mg/L		42	72	65	44	44		43	43		43	43		44	32
Temperature, Field	deg C		16	15.4	13.2		13.6	14.5			13.3			16.9		13
Thallium	mg/L		0.001 U			0.001 U	0.00026 J		0.001 U	0.00046 J		0.00032 J	0.001		0.001	0.001 U
Turbidity, Field	NTU		22.8	811.12	762.15		184.7	167.8			114.48			23.99		98.32
Vanadium	mg/L															
Zinc	mg/L		0.02 U													

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

		Location	96154R	96156	96156	96156	96156	96156	96156	96156	96156	96156	96157	96157	96157	96157
		Date	2025-09-12	2016-08-23	2016-10-03	2016-11-29	2017-01-30	2017-03-21	2017-04-25	2017-06-06	2017-07-12	2018-03-26	2021-09-28	2022-03-29	2022-09-12	2022-12-02
		Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Unit															
Alkalinity, Total as CaCO3	mg/L	500				165	150					440	340	380	
Aluminum	mg/L							0.05 U	0.079	0.084 B			0.12		
Antimony	mg/L	0.00069 J	0.0001 J	0.00141	0.00208	0.00022	0.0025	0.002 U	0.0017 J	0.0012 JB			0.002 U		
Arsenic	mg/L	0.0047 J	0.0141	0.0184	0.0398	0.00202	0.0035 J	0.0042 J	0.0043 J	0.0036 J			0.03		
Barium	mg/L	0.14	16.2	17.4	17.7	14.8	16 JB	16	16	15			0.42		
Beryllium	mg/L	0.001 U	0.0002 U	0.000129	0.0003 J	2E-05 U	0.00043 J	0.001 U	0.001 UJ	0.001 U			0.001 U		
Bicarbonate Alkalinity as CaCO3	mg/L	280										440	340	380	
Bicarbonate Alkalinity as HCO3	mg/L														
Boron	mg/L	0.49 J	0.394	0.357	0.375	0.379	0.46	0.4	0.43 B	0.4 B		0.15	0.16 J	0.12	
Bromide	mg/L					58.6	57	73	67	51					
Cadmium	mg/L	0.00011 J	0.00022	0.00221	0.00419	0.0001	0.00043 J	0.00027 J	0.00088 J	0.0015			0.0001 U		
Calcium	mg/L	16	409	354	399	346	380 B	380	390	370		55	61	51	
Carbonate Alkalinity as CaCO3	mg/L	220										5 U	5 U	5 U	
Chloride	mg/L	450	11700			12000	13000	17000	12000	12000		240	290	210	
Chromium	mg/L	0.0015 J	0.0011	0.0195	0.0598	0.000629	0.0011 J	0.002 U	0.0077 J	0.016			0.0014 J		
Cobalt	mg/L	0.00032 J	0.00194	0.00371	0.00517	0.00145	0.0021	0.0016	0.0015	0.0017			0.00054		
Conductivity, Field	uS/cm	2551	30150	32283	17682	30266					32509	1358	1639	1481	
Copper	mg/L							0.82	1.3 B	1.3			0.005 U		
Dissolved Oxygen, Field	mg/L	2	2.61	2.64	5.31	4.89					0.24		0.35	1.44	
Dissolved Solids, Total	mg/L	1300	18300			18100	15000	19000 J	21000	15000 J		740	800 J		960
Fluoride	mg/L	3.8	0.33			2 U	2.5 U	5 U	1.3 U	2.5 U		0.93	0.88	0.86	
Iron	mg/L							4.5	7.7	2.7			2.9		
Lead	mg/L	0.00048 J	0.00236	0.0218	0.0455	0.00115	0.0022 J	0.001 U	0.0055	0.0033			0.00053		
Lithium	mg/L	0.062	0.269	0.252	0.296	0.294	0.22	0.25	0.25	0.23			0.0051 J		
Magnesium	mg/L	1 U			117	111		130	140	130		12	12	12	
Manganese	mg/L						0.93 B	0.75	0.79	0.74			0.16		
Mercury	mg/L	0.0002 U	5E-06 U	0.0002 U	2.1E-05	1.1E-05	0.0002 U	0.0002 U	0.0002 U	0.0002 U			0.0002 U	0.0002 U	
Molybdenum	mg/L	0.11	0.00987	0.017	0.0225	0.0054	0.0056 J	0.0073 J	0.017	0.0086 J			0.0064		
Nickel	mg/L							0.0045	0.0049	0.055			0.005 U		
Oxidation-Reduction Potential, Field	mV	-14.5											-212.6	-159.1	
pH, Field	pH units	9.62	7.07	6.83	7.23	6.77	8.93	8.32	7.26	8.04	7.4	7.6	7.49	7.47	
Potassium	mg/L	4.9			36.5	47.4	22 JB	22	22	21		1.6	1.5	1.6	
Radium-226	pCi/L	0.211 U	33.8			51.2	94	86.5	64.4	59.3 J			0.518	0.818 J	
Radium-226/228	pCi/L	1.2 J	75.85	41.96		122.3	189	189	138	119 J			1.49	1.54 J	
Radium-228	pCi/L	0.985	42.05	41.96		71.1	95.2	103	73.4	60.2			0.974	0.724 U	
Redox Potential, Field	mV		-82.4	-66.3	176.5	102.7									
Selenium	mg/L	0.005 U	0.0006 J	0.0004 J	0.001 J	0.0001	0.0013 J	0.005 U	0.00091 J	0.0011 JB			0.005 U		
Silver	mg/L							6.6E-05 J	0.001 U	8.9E-05 J			0.001 U		
Sodium	mg/L	560			2620	1400	6800 JB	6100	1 U	6400		220	250	210	
Strontium	mg/L				30.4	25.3	31 JB	33	31 B	27			0.84		
Sulfate	mg/L	43	1.9			1 J	50 U	100 U	25 U	50 U		4.3	2	3.4	
Temperature, Field	deg C	15.5	15.2	16.1	15.7	9.1					12.7	16	14	17.1	
Thallium	mg/L	0.001 U	0.0005 U	0.0002 J	0.0002 J	3E-05 J	0.001 U	0.001 U	0.001 U	0.001 U			0.001 U		
Turbidity, Field	NTU	38.15	9	38.2	123.8	64.8	81.7	72.5	83.2	48	1	2.8	36.6	13.04	
Vanadium	mg/L														
Zinc	mg/L							0.19	0.18	0.16			0.02 U		

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

		Location	96157	96157	96157	96157	96157	96157	96157	96157	96157	96157	96158	96158	96158	96158
		Date	2023-03-29	2023-09-18	2023-09-18	2023-09-18	2024-03-11	2024-03-11	2024-09-17	2024-09-17	2025-03-14	2025-09-11	2021-09-28	2022-03-29	2022-03-29	2022-09-12
		Sample Type	N	FD	N	N	N	N	N	N	N	N	N	FD	N	N
Analyte	Unit															
Alkalinity, Total as CaCO3	mg/L		340	370		370		380		340	360	340	330	320	320	340
Aluminum	mg/L													1.5	1.4	
Antimony	mg/L		0.002 U	0.002 U		0.002 U		0.002 U		0.002	0.002 U	0.002 U		0.002 U	0.00089 J	
Arsenic	mg/L		0.03	0.037		0.037		0.031		0.054	0.02	0.047		0.0011 J	0.0011 J	
Barium	mg/L		0.46	0.42		0.42		0.4		0.54	0.41	0.54		0.43	0.42	
Beryllium	mg/L		0.001 U	0.001 U		0.001 U		0.001 U		0.001	0.001 U	0.001 U		0.001 U	0.001 U	
Bicarbonate Alkalinity as CaCO3	mg/L		340	370		370		380		340	360	340	330	320	320	340
Bicarbonate Alkalinity as HCO3	mg/L															
Boron	mg/L		0.13	0.14		0.14		0.14		0.13	0.15	0.14 J	0.4	0.39 J	0.4 J	0.38
Bromide	mg/L															
Cadmium	mg/L		0.001 U	0.001 U		0.001 U		0.001 U		0.001	0.001 U	0.001 U		0.0001 U	7.5E-05 J	
Calcium	mg/L		61	54		55		54		70	62	70	64	67	66	64
Carbonate Alkalinity as CaCO3	mg/L		5 U	5 U		5 U		5 U		5	5 U	5 U	5 U	5 U	5 U	5 U
Chloride	mg/L		330	280		270		250		480	280	430	1100	1000	1000	1100
Chromium	mg/L		0.005 U	0.005 U		0.005 U		0.0015 J		0.0028	0.005 U	0.0023 J		0.0056	0.0059	
Cobalt	mg/L		0.00035 J	0.00025 J		0.00025 J		0.00034 J		0.00065	0.00028 J	0.001 U		0.0029	0.0029	
Conductivity, Field	uS/cm		1829		1430		1497		2214		2052	2047	3724	4072	4072	3890
Copper	mg/L													0.0026 J	0.0025 J	
Dissolved Oxygen, Field	mg/L		0.48		0.81		1.84		0.4		0.7	0.12		1.12	1.12	0.91
Dissolved Solids, Total	mg/L		890	480		690		750		960	810	1000	2000	2000	2000	
Fluoride	mg/L		0.82	0.73		0.73		0.84		0.92	0.86	0.9	1.3	1.2	1.3	1.2
Iron	mg/L													3.6	3.6	
Lead	mg/L		0.001 U	0.001 U		0.001 U		0.001 U		0.001	0.001 U	0.001 U		0.0018	0.0018	
Lithium	mg/L		0.0027 J	0.0051 J		0.0064 J		0.0052 J		0.0089	0.005 J	0.0077 J		0.039	0.037	
Magnesium	mg/L		12	11		12		12		13	12	14	13	14	13	14
Manganese	mg/L													0.18	0.17	
Mercury	mg/L		0.0002 U	0.0002 U		0.0002 U		0.0002 UJ		0.0002	0.0002 U	0.0002 U		0.0002 U	0.0002 U	0.0002 U
Molybdenum	mg/L		0.0066	0.007		0.007		0.0075		0.006	0.0064	0.0058		0.005	0.0051	
Nickel	mg/L													0.0048 J	0.0046 J	
Oxidation-Reduction Potential, Field	mV		-197.4		-168.8		-181.3		-222.9		-150	-233.8		-105.2	-105.2	-101.1
pH, Field	pH units		7.48		7.76		7.5		7.52		7.51	7.55	7.34	7.29	7.29	7.31
Potassium	mg/L		1.6	1.5		1.5		1.5		1.9	1.6	1.9	3.3	3.5	3.3	3.3
Radium-226	pCi/L		0.546	0.749		0.394		0.586 J		0.549	0.379	0.406 J		0.821	1.09	0.92 J
Radium-226/228	pCi/L		1.26	1.83		1.47		1.72 J		1.44	0.857	1.1 J		3.57	3.52	2.68 J
Radium-228	pCi/L		0.71	1.09		1.08		1.13		0.889	0.478 U	0.699 U		2.75	2.43	1.76
Redox Potential, Field	mV															
Selenium	mg/L		0.005 U	0.005 U		0.005 U		0.005 U		0.005	0.005 U	0.005 U		0.005 U	0.005 U	
Silver	mg/L													0.001 U	0.00062 J	
Sodium	mg/L		260	240		240		240		320	270	320	700	750	830	730
Strontium	mg/L													2.2	2.5	
Sulfate	mg/L		0.87 J	1.4		1.5		1.7		1	2.1	2	20	15	16	21
Temperature, Field	deg C		13.7		15.3		13.9		16.8		14.5	16.7	16	13	13	18.2
Thallium	mg/L		0.001 U	0.001 U		0.001 U		0.00031 J		0.001	0.001 U	0.001 U		0.001 U	0.001 U	
Turbidity, Field	NTU		9.29		3.63		5.35		23.64		3.38	19.17	1.5	71.3	71.3	30.1
Vanadium	mg/L															
Zinc	mg/L													0.02 U	0.02 U	

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	96158	96158	96158	96158	96158	96158	96158	96158	96158	96158	96158	96158	9631	9631
	Date	2022-12-02	2023-03-29	2023-03-29	2023-09-18	2023-09-18	2024-03-11	2024-03-11	2024-09-17	2024-09-17	2025-03-14	2025-09-11	2025-09-11	2021-09-27	2024-02-21
	Sample Type	N	FD	N	N	N	N	N	N	N	N	FD	N	N	FD
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L		320	310		340		340		330	340	320	320	290	65
Aluminum	mg/L														
Antimony	mg/L		0.002 U	0.002 U		0.002 U		0.002 U		0.002	0.002 U	0.002 U	0.002 U		
Arsenic	mg/L		0.005 U	0.005 U		0.0011 J		0.005 U		0.005 U	0.0019 J	0.005 U	0.0008 J		
Barium	mg/L		0.43	0.42		0.37		0.33		0.37	0.37	0.34	0.36		
Beryllium	mg/L		0.001 U	0.001 U		0.001 U		0.001 U		0.001	0.001 U	0.001 U	0.001 U		
Bicarbonate Alkalinity as CaCO3	mg/L		320	310		340		340		330	340	320	320	290	65
Bicarbonate Alkalinity as HCO3	mg/L														
Boron	mg/L		0.38	0.38		0.36		0.4		0.38	0.41	0.35 J	0.37 J	0.38	0.35
Bromide	mg/L														
Cadmium	mg/L		0.001 U	0.001 U		0.001 U		0.001 U		0.001	0.001 U	0.001 U	0.001 U		
Calcium	mg/L		63	62		63		67		65	65	65	68	310	1400
Carbonate Alkalinity as CaCO3	mg/L		5 U	5 U		5 U		5 U		5	5 U	5 U	5 U	5 U	5 U
Chloride	mg/L		1100	1100		1200 J		1500		1100	1100	1000	1100	9700	30000
Chromium	mg/L		0.005 U	0.005 U		0.007		0.005 U		0.007	0.005 U	0.0013 J	0.005 U		
Cobalt	mg/L		0.00067 J	0.00073 J		0.0017		0.00071 J		0.0016	0.00056 J	0.001 U	0.001 U		
Conductivity, Field	uS/cm			3751	3491		4001		4065		4072		3905	27285	
Copper	mg/L														
Dissolved Oxygen, Field	mg/L			0.37	0.86		1.47		0.45		0.73		0.17		
Dissolved Solids, Total	mg/L	1800	1900	1900		3100		1900		1900	2000	2000	1900	2900	35000
Fluoride	mg/L		1.2	1.2		1		1.1		1.1	1.2	1.2	1.2	2.5 U	2.5 U
Iron	mg/L														
Lead	mg/L		0.001 U	0.001 U		0.0011		0.001 U		0.00093	0.001 U	0.001 U	0.001 U		
Lithium	mg/L		0.03	0.031		0.038		0.035		0.038	0.034	0.033	0.034		
Magnesium	mg/L		13	13		13		14		13	12	13	14	87	440
Manganese	mg/L														
Mercury	mg/L		0.0002 U	0.0002 U		0.0002 U		0.0002 U		0.0002	0.0002 U	0.0002 U	0.0002 U		
Molybdenum	mg/L		0.0089	0.0088		0.0095		0.0096		0.011	0.0086	0.0086	0.0091		
Nickel	mg/L														
Oxidation-Reduction Potential, Field	mV			-109.6	-69.7		-81		-155.3		-46.2		-129.4		
pH, Field	pH units			7.3	7.58		7.27		7.32		7.34		7.32	7.16	
Potassium	mg/L		3.1	3.2		3.2		3.2		3.6	3.3	3.3	3.4	10	23
Radium-226	pCi/L		1.17	0.809		0.872		0.641		0.8	0.636	0.724 J	0.651 J		
Radium-226/228	pCi/L		2.46	2.25		2.69		2.68		2.4	3.03	1.68 J	1.56 J		
Radium-228	pCi/L		1.28	1.44		1.82		2.04		1.6	2.39	0.954	0.911 U		
Redox Potential, Field	mV														
Selenium	mg/L		0.005 U	0.005 U		0.005 U		0.005 U		0.005	0.005 U	0.005 U	0.005 U		
Silver	mg/L														
Sodium	mg/L		680	680		670		710		670	750	660	700	5900	12000
Strontium	mg/L														
Sulfate	mg/L		16	16		22		40		41	56	26	26	34 J	50 U
Temperature, Field	deg C			14.2	15.5		14.3		17.2		15.5		17.1	16	
Thallium	mg/L		0.001 U	0.001 U		0.0006 J		0.001 U		0.001	0.001 U	0.001 U	0.001 U		
Turbidity, Field	NTU			11.22	20.15		5.87		68.43		2.92		19	4.7	
Vanadium	mg/L														
Zinc	mg/L														

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	9631	9631	9631	9631	9631	9631	9631	9631	9631	9631	9631	9631	9631	9631
	Date	2024-02-21	2024-02-21	2024-02-21	2024-02-21	2024-03-13	2024-03-13	2024-03-13	2024-04-10	2024-04-10	2024-04-10	2024-04-10	2024-04-10	2024-04-10	2024-06-26	2024-06-26
	Sample Type	FD	N	N	N	FD	N	N	FD	FD	N	N	N	N	FD	FD
Analyte	Unit															
Alkalinity, Total as CaCO3	mg/L	73		66	74	66		62	95	88		96	98	72	78	
Aluminum	mg/L															
Antimony	mg/L	0.002 U			0.00067 J	0.002 U		0.002 U		0.002 U			0.002 U		0.002 U	
Arsenic	mg/L	0.0043 J			0.0043 J	0.0031 J		0.0023 J		0.0027 J			0.0021 J		0.0021 J	
Barium	mg/L	38			33	37		37		35			37		40	
Beryllium	mg/L	0.001 U			0.001 U	0.001 U		0.001 U		0.00066 J			0.001 U		0.001 U	
Bicarbonate Alkalinity as CaCO3	mg/L	73		66	74	66		62	95	88		96	98	72	78	
Bicarbonate Alkalinity as HCO3	mg/L															
Boron	mg/L			0.35		0.39		0.38	0.35 J			0.35 J		0.35		
Bromide	mg/L															
Cadmium	mg/L	0.00032 J			0.00048 J	0.001 U		0.001 U		0.001 U			0.001 U		0.001 U	
Calcium	mg/L	1600		1400	1400	1600		1600	1400	1400		1300	1400	1400	1400	
Carbonate Alkalinity as CaCO3	mg/L	5 U		5 U	5 U	5 U		5 U	5 U	5 U		5 U	5 U	5 U	5 U	
Chloride	mg/L			29000		29000		28000	26000			27000		29000		
Chromium	mg/L	0.0051			0.005	0.0046 J		0.0029 J		0.005 U			0.005 U		0.005 U	
Cobalt	mg/L	0.0056			0.0056	0.0018		0.0019		0.0036			0.0023 J		0.0011	
Conductivity, Field	uS/cm		64232				63772				64103					
Copper	mg/L															
Dissolved Oxygen, Field	mg/L		0.5				2.15				0.2					
Dissolved Solids, Total	mg/L			35000		33000 J		17000 J	34000			35000		42000		
Fluoride	mg/L	2.5 U		2.5 U	2.5 U	5 U		5 U	2.5 U	5 U		2.5 U	5 U	1.3 U	2.5 U	
Iron	mg/L															
Lead	mg/L	0.0011			0.0011	0.001 U		0.001 U		0.001 U			0.001 U		0.001 U	
Lithium	mg/L	0.33			0.33	0.34		0.34		0.31			0.35		0.34	
Magnesium	mg/L	440		410	430	430		430	490	470		450	480	440	410	
Manganese	mg/L															
Mercury	mg/L	0.0002 U			0.0002 U	0.0002 U		0.0002 U		0.0002 U			0.0002 U		0.0002 U	
Molybdenum	mg/L	0.0067			0.007	0.0034 J		0.0035 J		0.0084			0.0055		0.0018 J	
Nickel	mg/L															
Oxidation-Reduction Potential, Field	mV		-90.1				-93.7				-114.6					
pH, Field	pH units		7.02				6.89				7.15					
Potassium	mg/L	23		21	22	23		23	22	25		22	26	23	22	
Radium-226	pCi/L	37.6 J			35.5 J	35 J		40.7 J		39.9 J			44.4 J		28.5 J	
Radium-226/228	pCi/L	108 J			107 J	108 J		107 J		107 J			118 J		107 J	
Radium-228	pCi/L	70.4 J			71.6 J	73.4 J		65.9 J		67.6 J			73.8 J		78.3 J	
Redox Potential, Field	mV															
Selenium	mg/L	0.0012 J			0.0022 J	0.0016 J		0.0014 J		0.0039 J			0.0033 J		0.005 U	
Silver	mg/L															
Sodium	mg/L	12000		11000	12000	16000		14000	13000	12000		13000	13000	13000	13000	
Strontium	mg/L															
Sulfate	mg/L			50 U		100 U		100 U	19 J			50 U		25 U		
Temperature, Field	deg C		13.5				15.1				13.8					
Thallium	mg/L	0.001 U			0.001 U	0.001 U		0.001 U		0.001 U			0.001 U		0.02 U	
Turbidity, Field	NTU		28.93				13.75				8.75					
Vanadium	mg/L															
Zinc	mg/L															

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	9631	9631	9631	9631	9631	9631	9631	9631	9631	9631	9631	9631	9631	9631
	Date	2024-06-26	2024-06-26	2024-06-26	2024-08-29	2024-08-29	2024-08-29	2024-08-29	2024-08-29	2024-09-20	2024-10-14	2024-10-14	2024-10-14	2024-12-06	2024-12-06
	Sample Type	N	N	N	FD	FD	N	N	N	N	N	N	N	N	N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L		75	120	81	71		80	76	70		74	82		66
Aluminum	mg/L														
Antimony	mg/L			0.00085 J		0.002 U			0.002 U	0.002			0.00064 J		
Arsenic	mg/L			0.0022 J		0.0021 J			0.0023 J	0.0026			0.0028 J		
Barium	mg/L			40		46			41	35			39		
Beryllium	mg/L			0.001 UJ		0.001 U			0.001 U	0.001			0.001 U		
Bicarbonate Alkalinity as CaCO3	mg/L		75	120	81	71		80	76	70		74	82		66
Bicarbonate Alkalinity as HCO3	mg/L														
Boron	mg/L		0.37		0.41			0.41		0.37		0.38			0.38
Bromide	mg/L														
Cadmium	mg/L			0.001 U		0.00011 J			0.00015 J	0.00016			0.0002 J		
Calcium	mg/L		1500	1600	1500	1800		1100	1600	1400		1700	1800		1600
Carbonate Alkalinity as CaCO3	mg/L		5 U	5 U	5 U	5 U		5 U	5 U	5		5 U	5 U		5 U
Chloride	mg/L		30000		29000			30000		29000		25000			28000
Chromium	mg/L			0.005 U		0.0012 J			0.0012 J	0.0046			0.002 J		
Cobalt	mg/L			0.0012		0.002			0.0021	0.0023			0.0042		
Conductivity, Field	uS/cm	63542					61360			62427	68146			72831	
Copper	mg/L														
Dissolved Oxygen, Field	mg/L	0.76					0.95			0.29	0.6			0.64	
Dissolved Solids, Total	mg/L		37000		43000			41000		41000		42000 J			31000
Fluoride	mg/L		1.3 U	2.5 U	2.5 U	5 U		2.5 U	5 U	5		5 U	5 U		5 U
Iron	mg/L														
Lead	mg/L			0.001 U		0.001 U			0.00049 J	0.00079			0.001 U		
Lithium	mg/L			0.36		0.32			0.33	0.34			0.36		
Magnesium	mg/L		470	460	380	450		380	460	490		490	480		510
Manganese	mg/L														
Mercury	mg/L			0.0002 UJ		0.0002 U			0.0002 U	0.0002			0.0002 UJ		
Molybdenum	mg/L			0.0022 J		0.0024 J			0.0026 J	0.0036			0.0048 J		
Nickel	mg/L														
Oxidation-Reduction Potential, Field	mV	-105.6					-108.2			-138.1	-96.2			-43.1	
pH, Field	pH units	7.02					7.04			7	7.07			7.04	
Potassium	mg/L		25	24	20	23		20	24	25		25	25		24
Radium-226	pCi/L			28.8 J		32.6 J			33.7 J	32.8			28.7 J		
Radium-226/228	pCi/L			97.2 J		111 J			111 J	106			94.1 J		
Radium-228	pCi/L			68.4 J		78.2 J			77.2 J	73.1			65.5 J		
Redox Potential, Field	mV														
Selenium	mg/L			0.0011 J		0.005 U			0.005 U	0.0014			0.0016 J		
Silver	mg/L														
Sodium	mg/L		13000	13000	12000	13000		8700	13000	13000		14000	14000		13000
Strontium	mg/L														
Sulfate	mg/L		25 U		1000 U			1000 U		100		100 U			100 U
Temperature, Field	deg C	16.7					21.5			19.6	15.4			11.7	
Thallium	mg/L			0.005 U		0.001 U			0.001 U	0.001			0.00052 J		
Turbidity, Field	NTU	7.03					4.87			8.28	8.11			6.99	
Vanadium	mg/L														
Zinc	mg/L														

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	9631	9631	9631	9631	9801	9801	9801	9801	9801	9801	9801	9801	9801	9801
	Date	2024-12-06	2025-03-05	2025-09-17	2025-09-17	2016-08-24	2016-10-06	2016-12-02	2017-02-01	2017-03-29	2017-06-09	2017-06-09	2017-07-17	2018-03-16	2018-09-12
	Sample Type	N	N	FD	N	N	N	N	N	N	FD	N	N	N	N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L	110	69	75	72			141	160					130	130
Aluminum	mg/L									0.25 U	1.3 U	1.3 U	0.1 U		
Antimony	mg/L	0.0014 J	0.002 U	0.002 U	0.002 U	0.0005 U	0.0005 U	5E-05 U	0.0005 U	0.01 U	0.05 U	0.05 U	0.004 U		0.002 U
Arsenic	mg/L	0.0023 J	0.0028 J	0.0034 J	0.0041 J	0.00075	0.00109	0.00072	0.00056	0.025 U	0.13 U	0.13 U	0.01 U		0.005 U
Barium	mg/L	29	43	39	37	5.16	4.84	4.63	4.33	5 B	4.7 B	5 B	5.3		4.8
Beryllium	mg/L	0.00029 J	0.001 U	0.001 U	0.001 U	0.0002 U	0.0002 U	2E-05 U	0.0002 U	0.005 U	0.001 U	0.001 U	0.002 U		0.001 U
Bicarbonate Alkalinity as CaCO3	mg/L	110	69	75	72									130	130
Bicarbonate Alkalinity as HCO3	mg/L														
Boron	mg/L		0.37	0.4 J	0.37 J	0.378	0.329	0.353	0.404	0.42	0.45	0.45	0.52 JB	0.44	0.44
Bromide	mg/L							34.3	36.2	41	36 J	35 J	39 J		
Cadmium	mg/L	0.00083 JF2F1	0.001 U	0.001 U	0.00013 J	0.0002 U	0.0002 U	2E-05 U	0.0002 U	0.005 U	0.025 U	0.025 U	0.002 U		0.001 U
Calcium	mg/L	1300	1500	1600	1500	202	198	184	180	180 B	170	190	200	220	200
Carbonate Alkalinity as CaCO3	mg/L	5 U	5 U	5 U	5 U									5 U	5 U
Chloride	mg/L		30000	27000	26000	7930	7950	7210	7330	8800	8300	8100	9000	8300	8400
Chromium	mg/L	0.0017 J	0.0012 J	0.0027 J	0.0063	0.0045	0.0024	0.00216	0.000768	0.0017 J	0.05 U	0.05 U	0.0025 J		0.0018 J
Cobalt	mg/L	0.0033	0.0018	0.0019	0.0018	0.00173	0.00172	0.000975	0.000957	0.0014 J	0.025 U	0.025 U	0.0011 J		0.0015
Conductivity, Field	uS/cm		62087		61937	2129	23618	23470	22980					22901	
Copper	mg/L									0.01 U	0.05 U	0.05 U	0.004 U		
Dissolved Oxygen, Field	mg/L		0.47		0.41	3.03	0.71	2.8	1.53					0.22	
Dissolved Solids, Total	mg/L		38000	42000	39000	12600	13000	12300	11300	13000 J	14000	14000	14000 J	13000	14000
Fluoride	mg/L	2.5 U	5 U	2.5 U	2.5 U	0.87	0.61	0.6 J	0.91	1 J	5 U	5 U	5 U	2.5 U	1
Iron	mg/L									0.51 JB	2.5 U	2.5 U	0.43		
Lead	mg/L	0.00053 JF2F1	0.001 U	0.001 U	0.001 U	0.0001 J	0.0001 J	0.000354	9E-05 J	0.005 U	0.005 U	0.005 U	0.002 U		0.001 U
Lithium	mg/L	0.35	0.35	0.37	0.35	0.141	0.142	0.16	0.159	0.12	0.13	0.12	0.15		0.13
Magnesium	mg/L	450	460	450	440			54.6	55.2	63 B	58	63	63	61	
Manganese	mg/L									0.57	0.44	0.47	0.51		
Mercury	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	5E-06 U	1.6E-05	1.6E-05	1E-05	0.0002 U	0.0002 U	0.0002 U	0.0002 U		0.0002 U
Molybdenum	mg/L	0.0031 J	0.0025 J	0.0024 J	0.003 J	0.00533	0.00723	0.00651	0.0068	0.0042 J	0.05 U	0.05 U	0.004 J		0.0039 J
Nickel	mg/L									0.01 U	0.05 U	0.05 U	0.0035 J		
Oxidation-Reduction Potential, Field	mV		-88.9		-140										
pH, Field	pH units		7.05		7.01	6.95	7.16	6.92	7.03	7.2		7.21	7.16	7.32	7.34
Potassium	mg/L	24	24	23	23			14.4	18.6	9.6 B	8.3 J	9.3 J	9.5	9.2	
Radium-226	pCi/L	26	25 J	38.3 J	35.4 J	3.39	6.84	3.47	4.19	4.48	4.49	3.83	4.35 J		5.31
Radium-226/228	pCi/L	81.5	98.6 J	106 J	102 J	8.15	13.99	7.83	9.95	10.5	10.3	11.3	11 J		11.5
Radium-228	pCi/L	55.4	73.7 J	67.7 J	66.3 J	4.76	7.15	4.36	5.76	5.98	5.8	7.43	6.64 J		6.16
Redox Potential, Field	mV					124.2	-91.8	85.3	-87.4						
Selenium	mg/L	0.0028 J	0.005 U	0.005 U	0.001 J	0.001 U	0.001 U	0.001 U	0.001 U	0.025 U	0.13 U	0.13 U	0.01 U		0.005 U
Silver	mg/L									0.005 U	0.005 U	0.005 U	0.002 U		
Sodium	mg/L	11000 F2	14000	11000	13000			4310	1650	4400 JB	4200	4700	4600 JB	4700	
Strontium	mg/L							16.4	15.6	19 B	13 B	13 B	20		
Sulfate	mg/L		100 U	50 U	50 U	3.4	7.2	6.7	3.4	8.6 J	100 U	100 U	100 U	50 U	6.3 J
Temperature, Field	deg C		14.6		17.2	19.72	16.5	14.2	13.5					14.9	
Thallium	mg/L	0.0008 J	0.001 U	0.001 U	0.001 U	0.0002 J	0.0001 J	0.000528	0.0005 U	0.005 U	0.005 U	0.005 U	0.002 U		0.001 U
Turbidity, Field	NTU		4.58		15.08	4.7	9.7	3	3.9	7.7		3.2	3.5	1.5	4.22
Vanadium	mg/L												0.01 U		
Zinc	mg/L									0.1 U	0.5 U	0.5 U	0.04 U		

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

		Location	9801	9801	9801	9801	9801	9801	9801	9801	9801	9801	9801	9801	9801
		Date	2019-03-12	2019-09-24	2020-03-24	2021-09-27	2021-09-27	2022-03-25	2022-09-19	2023-04-04	2023-09-22	2023-09-22	2024-03-14	2024-03-14	2024-09-11	2025-03-27
		Sample Type	N	N	N	FD	N	N	N	N	N	N	N	N	N	N
Analyte	Unit															
Alkalinity, Total as CaCO3	mg/L	140	130	140	150	150	140	140	150		140		140	140	140
Aluminum	mg/L						0.05 U								
Antimony	mg/L						0.002 U		0.002 U		0.002 U		0.002 U	0.002	0.002 U
Arsenic	mg/L						0.00088 J		0.005 U		0.005 U		0.005 U	0.00093	0.0012 J
Barium	mg/L						5.1		4.7		4.7		4.7	4.8	5.5
Beryllium	mg/L						0.001 U		0.001 U		0.001 U		0.001 U	0.001	0.001 U
Bicarbonate Alkalinity as CaCO3	mg/L		130	140	150	150	140	140	150		140		140	140	140
Bicarbonate Alkalinity as HCO3	mg/L	140													
Boron	mg/L	0.44	0.42	0.38	0.43	0.4	0.49 J	0.44	0.43		0.39		0.42	0.38	0.43
Bromide	mg/L														
Cadmium	mg/L						0.0001 U		0.001 U		0.001 U		0.001 U	0.001	9E-05 J
Calcium	mg/L	180	250	180	200	190	210	180	180		200		200	190	220
Carbonate Alkalinity as CaCO3	mg/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U		5 U		5 U	5	5 U
Chloride	mg/L	150	9300	8900	7600	7700	7700	7600	8400		8500		8000	7700	9100
Chromium	mg/L						0.005 U		0.005 U		0.005 U		0.0012 J	0.0019	0.0024 J
Cobalt	mg/L						0.0011		0.00099 J		0.001		0.0011	0.0013	0.0016
Conductivity, Field	uS/cm			21314	19963	19963	22640	22895	21700	17637		22504			22489
Copper	mg/L						0.005 U								
Dissolved Oxygen, Field	mg/L						0.03	0.35	0.34	0.78		1.28			0.69
Dissolved Solids, Total	mg/L	11000 HT	14000	11000	8100	9300	12000	11000	12000		9100		11000	12000	13000
Fluoride	mg/L	0.05 U	1.1	1.1	0.9	0.85	0.93	0.92 U	0.9		0.99		0.74	0.77	0.96
Iron	mg/L						0.098 J								
Lead	mg/L						0.0005 U		0.001 U		0.001 U		0.001 U	0.001	0.00069 J
Lithium	mg/L						0.2 U		0.12		0.13		0.13	0.12	0.13
Magnesium	mg/L	69	83 J	54	56	53	76	58	58		63		58	60	60
Manganese	mg/L						0.58								
Mercury	mg/L						0.0002 U	0.0002 U	0.0002 U		0.0002 U		0.0002 U	0.0002	0.0002 U
Molybdenum	mg/L						0.0041 J		0.0036 J		0.0034 J		0.0038 J	0.0044	0.0043 J
Nickel	mg/L						0.005 U								
Oxidation-Reduction Potential, Field	mV						-131.4	-81	-69.8	68.8		17.3			90.3
pH, Field	pH units	7.51	7.49	7.4	7.26	7.26	7.43	7.35	7.42	7.33		7.28			7.38
Potassium	mg/L	9.1	12 J	8.7	9.5	8.9	12	8.5	8.8		9.6		9.4	9.2	9.6
Radium-226	pCi/L						3.87	3.69	3.67		2.88		3.39	2.32	3.46
Radium-226/228	pCi/L						8.7	9.34 J	7.99 J		8.11		7.61 J	7.53	10.2
Radium-228	pCi/L						4.82	5.64 J	4.32 J		5.23		4.22 J	5.2	6.78
Redox Potential, Field	mV														
Selenium	mg/L						0.0015 J		0.005 U		0.005 U		0.005 U	0.005	0.005 U
Silver	mg/L						0.001 U								
Sodium	mg/L	4800	4400	4200	4400	4400	1300	5200	4700		4600		4600	5100	4900
Strontium	mg/L						1.3								
Sulfate	mg/L	1 U	5.2 J	8.9 J	5.9 J	5.9 J	3.7 J	10 U	10 U		11		5.9 J	3.9	10 U
Temperature, Field	deg C			14	15	15	14	17.7	15.5	16.4		15.4			15.5
Thallium	mg/L						0.001 U		0.001 U		0.001 U		0.001 U	0.001	0.001 U
Turbidity, Field	NTU		6	1.4	5.4	5.4	3.2	3.32	4.15	16.11		5.08			17.32
Vanadium	mg/L														
Zinc	mg/L						0.02 U								

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

		Location	9801	9802	9802	9802	9802	9802	9802	9802	9802	9802	9802	9802	9802
		Date	2025-09-16	2016-08-24	2016-10-06	2016-12-02	2017-02-01	2017-03-29	2017-06-09	2017-07-17	2018-03-16	2018-09-12	2019-03-12	2019-09-24	2020-03-24	2020-09-22
		Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Unit															
Alkalinity, Total as CaCO3	mg/L		130			796	645				610	570	590	590	610	590
Aluminum	mg/L							0.071 J	0.22	0.05 U						
Antimony	mg/L		0.002 U	3E-05 J	4E-05 J	2E-05 J	3E-05 J	0.00034 J	0.002 U	0.002 U						
Arsenic	mg/L		0.0014 J	0.00091	0.00072	0.0012	0.00103	0.00094 J	0.00083 J	0.00089 J						
Barium	mg/L		4.8	0.0781	0.0711	0.0664	0.069	0.08 B	0.086 B	0.082						
Beryllium	mg/L		0.001 U	5E-06 J	2E-05 U	7E-06 J	6E-06 J	0.001 U	0.00035 J	0.001 U						
Bicarbonate Alkalinity as CaCO3	mg/L		130								610	570		590	610	590
Bicarbonate Alkalinity as HCO3	mg/L												590			
Boron	mg/L		0.41 J	0.172	0.157	0.178	0.242	0.18	0.19	0.27 JB	0.2		0.2	0.21	0.22	0.24
Bromide	mg/L					0.499	0.157	2.5 U	2.5 U	2.5 U						
Cadmium	mg/L		0.001 U	2E-05	1E-05 J	0.0001	5E-05	0.001 U	0.001 U	0.001 U						
Calcium	mg/L		210	29.3	28.7	24.5	28	29 B	31 J	30	30	36	31	26	26	26
Carbonate Alkalinity as CaCO3	mg/L		5 U								5 U	5 U	5 U	5 U	5 U	5 U
Chloride	mg/L		8300	36.1	35.2	39.1	38	39	38	40	39	35	39	38	41	47
Chromium	mg/L		0.005 U	0.0013	0.0028	0.00206	0.000823	0.00081 J	0.0025	0.0011 J						
Cobalt	mg/L		0.0011	0.000954	0.00112	0.000847	0.00108	0.0011	0.00048 J	0.00041 J						
Conductivity, Field	uS/cm		22480	1311	1361	1354	1366				13.31				1265	1284
Copper	mg/L							0.00056 JB	0.0017 JB	0.002 U						
Dissolved Oxygen, Field	mg/L		0.21	1.81	0.73	2.01	1.68				1.46					
Dissolved Solids, Total	mg/L		11000	766	784	796	810	820 J	830	810 J	810		780	740	780	790
Fluoride	mg/L		1.1	0.88	0.8	0.8	0.84	0.96	0.99	0.95	1	0.94	0.91	1	1	0.9
Iron	mg/L							0.18 JB	0.27	0.058 J						
Lead	mg/L		0.001 U	4.4E-05	3.1E-05	4.3E-05	6E-05	0.00026 J	0.001 U	0.001 U						
Lithium	mg/L		0.12	0.015	0.018	0.022	0.012	0.014	0.012	0.014						
Magnesium	mg/L		57			6.8	7.8	8.2 B	9	8.6	8.1	9.3	8.8	7.8	7.1	7
Manganese	mg/L							0.48	0.1	0.28						
Mercury	mg/L		0.0002 U	5E-06 U	5E-06 U	1.1E-05	5E-06 U	0.0002 U	0.0002 U	0.0002 U						
Molybdenum	mg/L		0.0037 J	0.0064	0.00563	0.00543	0.00525	0.0051 J	0.0046 J	0.0048 J						
Nickel	mg/L							0.00079 J	0.0018 J	0.0022						
Oxidation-Reduction Potential, Field	mV		-119.7													
pH, Field	pH units		7.46	6.94	7.25	7.3	7.19	7.24	7.2	7.11	7.31	7.59	7.51	7.43	7.4	7.32
Potassium	mg/L		9.4			1.66	2.05	1.5 B	1.5	1.6	1.5	1.9	1.7	1.6	1.6	1.5
Radium-226	pCi/L		3.12 J	0.443	0.327	0.603	0.245	0.173	0.181	0.188						
Radium-226/228	pCi/L		9.56 J	2.763	0.638	0.832	0.506	0.31 U	0.276 U	0.786						
Radium-228	pCi/L		6.44 J	2.32	0.311	0.229	0.261	0.136 U	0.0949 U	0.597						
Redox Potential, Field	mV			14.6	-32.9	9	-49.4									
Selenium	mg/L		0.005 U	5E-05 J	4E-05 J	3E-05 J	5E-05 J	0.005 U	0.005 U	0.0012 J						
Silver	mg/L							0.001 U	0.001 U	0.001 U						
Sodium	mg/L		4600			253	270	260 JB	270	290 JB	290	260	290	300	280	290
Strontium	mg/L					0.58	0.601	0.62 B	0.55 B	0.65						
Sulfate	mg/L		6.1 J	65.8	57.5	60.2	58.9	70 J	72	71	68	68	73	69	70	73
Temperature, Field	deg C		17.9	20.37	18.2	14.3	13.6				16.8				16	17
Thallium	mg/L		0.001 U	5.8E-05	8.4E-05	5.8E-05	5E-05 J	0.001 U	0.001 U	0.001 U						
Turbidity, Field	NTU		6.57	0.4	2.5	14.4	6.5	6.9	1.6	7.5	2.1	35.3		5	0.8	1
Vanadium	mg/L									0.005 U						
Zinc	mg/L							0.02 U	0.02 U	0.02 U						

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	9802	9802	9802	9802	9802	9802	9802	9802	9802	9802	9802	9802	9802	9806
	Date	2021-03-25	2021-09-28	2022-03-25	2022-09-19	2023-04-04	2023-09-22	2023-09-22	2024-03-14	2024-03-14	2024-09-23	2024-09-23	2025-03-06	2025-09-16	2016-12-02
	Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L	600	590	580	580	630		600		600		600	600	570	350
Aluminum	mg/L			0.51											
Antimony	mg/L			0.002 U		0.002 U		0.002 U		0.002 U		0.002	0.002 U	0.002 U	0.00011
Arsenic	mg/L			0.002 U		0.00091 J		0.005 U		0.005 U		0.0009	0.005 U	0.00085 J	0.00207
Barium	mg/L			0.076		0.062		0.071		0.08		0.064	0.064	0.067	0.0676
Beryllium	mg/L			0.001 U		0.001 U		0.001 U		0.001 U		0.001	0.001 U	0.001 U	0.000269
Bicarbonate Alkalinity as CaCO3	mg/L	600	590	580	580	630		580		600		600	600	570	
Bicarbonate Alkalinity as HCO3	mg/L														
Boron	mg/L	0.22	0.2	0.18 J	0.19	0.2		0.15		0.16		0.22	0.2	0.19 J	0.256
Bromide	mg/L														0.82
Cadmium	mg/L			0.0001 U		0.001 U		0.001 U		0.001 U		0.001	0.001 U	0.001 U	0.00037
Calcium	mg/L	27	28	36	30	27		32		33		29	30	32	5.35
Carbonate Alkalinity as CaCO3	mg/L	5 U	5 U	5 U	5 U	5 U		15		5 U		5	5 U	5 U	
Chloride	mg/L	42	42	32	37	38		38		37		42	38	38	187
Chromium	mg/L			0.0042 J		0.0015 J		0.005 U		0.0019 J		0.0019	0.005 U	0.0017 J	0.00653
Cobalt	mg/L			0.0033		0.0019		0.00072 J		0.00059 J		0.0015	0.00031 J	0.00065 J	0.00516
Conductivity, Field	uS/cm	1292	1275	1338	1377	1375	1253		1322		1358		1362	1348	1500
Copper	mg/L			0.005 U											
Dissolved Oxygen, Field	mg/L			1.01	0.64	1.55	0.87		1.48		0.55		0.63	0.22	1.44
Dissolved Solids, Total	mg/L	730	780	780 J	340	750		740		730		800	810	770	860
Fluoride	mg/L	1	1.1	0.87	0.99 U	0.97		1		0.93		1	0.94	0.98	1.14
Iron	mg/L			0.71											
Lead	mg/L			0.0005 U		0.001 U		0.001 U		0.00045 J		0.001	0.001 U	0.001 U	0.00481
Lithium	mg/L			0.014 J		0.013		0.013 J		0.012 J		0.014	0.013	0.013	0.022
Magnesium	mg/L	7.4	7.8	9.5	8.8	7.6		9		9.2		7.7	8.2	8.8	2.21
Manganese	mg/L			0.088											
Mercury	mg/L			0.0002 U	0.0002 U	0.0002 U		0.0002 U		0.0002 U		0.0002	0.0002 U	0.0002 U	0.000131
Molybdenum	mg/L			0.0028 J		0.005		0.0038 J		0.0043 J		0.0044	0.0042 J	0.0043 J	0.011
Nickel	mg/L			0.0032 J											
Oxidation-Reduction Potential, Field	mV			-73.9	-62	-32.6	58.9		-28.1		-33.4		25.7	-68.1	
pH, Field	pH units	7.34	7.33	7.31	7.33	7.33	7.18		7.08		7.17		7.39	7.48	8.61
Potassium	mg/L	1.5	1.5	1.7	1.5	1.3		1.4		1.4		1.5	1.6	1.5	2.09
Radium-226	pCi/L			0.366 U	0.124	0.151 U		0.0176 U		0.576		0.18	-0.0682 U	0.13 U	0.658
Radium-226/228	pCi/L			1.16	0.622	0.176 U		0.825		1.49 J		1.26	-0.127 U	0.564 J	0.7334
Radium-228	pCi/L			0.797	0.498 U	0.0256 U		0.808		0.915 J		1.08	-0.0586 U	0.434 U	0.0754
Redox Potential, Field	mV														-14.2
Selenium	mg/L			0.005 U		0.005 U		0.005 U		0.005 U		0.005	0.005 U	0.005 U	0.0007
Silver	mg/L			0.001 U											
Sodium	mg/L	290	280	270	270	260		280		250		290	300	280	277
Strontium	mg/L			0.64											0.166
Sulfate	mg/L	70	71	57	64	70		66		64		69	63	63	116
Temperature, Field	deg C	16	18	17	18.7	18.4	18.5		18.1		21.4		14.7	20.1	11
Thallium	mg/L			0.001 U		0.00048 J		0.001 U		0.00055 J		0.001	0.001 U	0.001 U	7E-05
Turbidity, Field	NTU	1.3	0.9	41.5	2.67	4.5	2.65		21.43		5.84		3.42	5.05	301.9
Vanadium	mg/L														
Zinc	mg/L			0.02 U											

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
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Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	9806	9806	9806	9806	9806	9806	9806	9806	9806	9806	9806	9806	9806	9806
	Date	2017-02-08	2017-03-27	2017-05-01	2017-06-27	2018-03-20	2018-09-11	2019-03-14	2019-09-26	2020-03-25	2020-09-17	2021-03-20	2021-09-27	2022-03-24	2022-09-20
	Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L	346				330	330	390 B	320	370	350	340	330	290	330
Aluminum	mg/L		2.4 J	2.8	0.057									0.021 J	
Antimony	mg/L	6E-05	0.0003 JB	0.00068 J	0.002 U		0.002 U	0.002 U						0.002 U	
Arsenic	mg/L	0.00113	0.0011 J	0.0015 J	0.001 J		0.005 U	0.005 U						0.002 U	
Barium	mg/L	0.05	0.057 B	0.058	0.041		0.031	0.033						0.02	
Beryllium	mg/L	0.000122	0.001 U	0.00038 J	0.001 U		0.00061 JF2F1	0.001 U						0.001 U	
Bicarbonate Alkalinity as CaCO3	mg/L					300	310	390 B	300	370	340	320	300	290	290
Bicarbonate Alkalinity as HCO3	mg/L														
Boron	mg/L	25	0.31	0.32	0.35	0.29	0.27	0.23	0.3	0.22	0.21	0.29	0.25	0.25	0.29
Bromide	mg/L	0.65	0.94 J	0.77 J	0.96			0.23 J							
Cadmium	mg/L	0.0001	0.001 U	0.001 U	0.001 U		0.001 U	0.001 U						0.0001 U	
Calcium	mg/L	159	4 B	4.2	3.7	3.6	9.6	37	4.1	31	37	7.2	8.9	26	3
Carbonate Alkalinity as CaCO3	mg/L					22	19	5 U	26	5 U	7.3	17	25	5 U	37
Chloride	mg/L	191	200	200	200	210	94	38	190	53	51	180	160	79	200
Chromium	mg/L	0.00291	0.004 B	0.0054	0.002 U		0.002 U	0.0015 J						0.005 U	
Cobalt	mg/L	0.00231	0.0016	0.0017	0.001 U		0.001 U	0.00046 J						0.0005 U	
Conductivity, Field	uS/cm	1574				1533				1666	1691	1464	1497	1709	1554
Copper	mg/L		0.0031 B	0.0066 B	0.002 U									0.005 U	
Dissolved Oxygen, Field	mg/L	1.25				1.78								8.85	2.65
Dissolved Solids, Total	mg/L	874	890 J	860 J	870	880	850	1000	1900	930	1100	890	950	980	750
Fluoride	mg/L	1.08	1.4	1.3	1.3	1.3	0.87	0.34	1.4	0.44	0.39	1.3	1	0.59	1.4 U
Iron	mg/L		2 JB	2.2	0.058 J									0.1 U	
Lead	mg/L	0.00227	0.0018 J	0.0028	0.001 U		0.001 U	0.001 U						0.0005 U	
Lithium	mg/L	0.249	0.013	0.012	0.012		0.036 F2F1	0.045						0.049	
Magnesium	mg/L	171	1.4 B	1.5	0.92 J	0.85 J			1.5	13	16	2.2	3.9	12	0.8 J
Manganese	mg/L		0.034 B	0.03	0.02 B									0.0077 J	
Mercury	mg/L	6E-06	0.0002 U	0.0002 U	0.0002 U		0.0002 U	0.0002 U						0.0002 U	0.0002 U
Molybdenum	mg/L	0.0107	0.012	0.011	0.023		0.0061	0.0023 J						0.0038	
Nickel	mg/L		0.0037 B	0.0036	0.002 U									0.005 U	
Oxidation-Reduction Potential, Field	mV													126.9	100.8
pH, Field	pH units	8.49	8.59	8.4	8.4	8.64	8.5	7.74	8.73	7.86	8.2	8.47	8.59	7.95	8.56
Potassium	mg/L	18.4	1.6 B	1.7	0.84 J	0.96 J			1.1	2.9	3.2	1.4	1.7	3	0.75 J
Radium-226	pCi/L	0.221	0.154	0.149	0.199		0.151	0.0571 U						0.0498 U	0.127
Radium-226/228	pCi/L	0.711	0.378	0.235 U	0.353		0.257 U	0.0148 U						0.97	0.382 U
Radium-228	pCi/L	0.49	0.224 U	0.0855 U	0.154 U		0.106 U	-0.0422 U						0.92	0.255 U
Redox Potential, Field	mV	69.1													
Selenium	mg/L	0.0003	0.005 U	0.0011 J	0.005 U		0.0015 J	0.00098 J						0.0012 J	
Silver	mg/L		0.00084 J	0.0012	0.001 U									0.001 U	
Sodium	mg/L	213	320 JB	350 B	350	320			320	310	350	290	330	360	290
Strontium	mg/L	1.28	0.15 B	0.16 B	0.13									1.2	
Sulfate	mg/L	113	130 J	130	130	130	240	450	130	510	490	140	230	450	130
Temperature, Field	deg C	12.4				11.8				13	14	13	13	13	14.9
Thallium	mg/L	4E-05 J	0.001 U	0.001 U	0.001 U		0.001 U	0.001 U						0.001 U	
Turbidity, Field	NTU	74.3	110.6	40.6	53.8	13	4.33		32	2.3	0.8	23.3	5.3	2.1	7.33
Vanadium	mg/L														
Zinc	mg/L		0.0093 J	0.02 U	0.02 U									0.12	

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	9806	9806	9806	9806	9806	9806	9806	9806	9806	9910	9910	9910	9910	9910
	Date	2023-04-05	2023-09-26	2023-09-26	2024-03-14	2024-03-14	2024-09-25	2024-09-25	2025-03-04	2025-09-15	2016-10-03	2018-09-25	2019-03-26	2019-09-22	2020-03-15
	Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L	330		340		330		330	340	310		830	860	850	870
Aluminum	mg/L														
Antimony	mg/L	0.002 U		0.002 U		0.002 U		0.002	0.002 U	0.002 U					
Arsenic	mg/L	0.0016 J		0.005 U		0.005 U		0.005	0.00083 J	0.0013 J					
Barium	mg/L	0.058		0.042		0.043		0.04	0.042	0.04					
Beryllium	mg/L	0.001 U		0.001 U		0.001 U		0.001	0.001 U	0.001 U					
Bicarbonate Alkalinity as CaCO3	mg/L	300		310		330		310	290	280		830	840	840	850
Bicarbonate Alkalinity as HCO3	mg/L														
Boron	mg/L	0.28		0.29		0.25		0.32	0.3	0.3 J		0.52	0.52	0.49	0.51
Bromide	mg/L														
Cadmium	mg/L	0.001 U		0.001 U		0.001 U		0.001	0.001 U	0.001 U					
Calcium	mg/L	7.7		3.7		21		3.8	3.7	3.9 J		12	13	13	11
Carbonate Alkalinity as CaCO3	mg/L	29		31		5 U		24	48	27		5 U	23	6.9	19
Chloride	mg/L	150		220		81		210	370	210		840	880	800	850
Chromium	mg/L	0.0063		0.0025 J		0.005 U		0.0015	0.005 U	0.0033 J					
Cobalt	mg/L	0.002		0.00053 J		0.001 U		0.00021	0.00021 J	0.001					
Conductivity, Field	uS/cm	1651	1642		1579		1601		1595	1630	4918				4626
Copper	mg/L														
Dissolved Oxygen, Field	mg/L	6	5.73		7.14		5.59		2.69	2.17	1.58				
Dissolved Solids, Total	mg/L	880		890		860		870	860	830		2400	2900	2700	2900
Fluoride	mg/L	1.1		1.2		0.64		1.3	1.3	1.3		2	1.9	2	2
Iron	mg/L														
Lead	mg/L	0.0021		0.0022		0.001 U		0.001	0.001 U	0.0011					
Lithium	mg/L	0.018		0.011		0.039		0.012	0.011	0.011					
Magnesium	mg/L	2.5		0.92 J		6.8		0.93	0.85 J	1.2		4	4.2	4.3	3.9
Manganese	mg/L														
Mercury	mg/L	0.0002 U		0.0002 U		0.0002 U		0.0002	0.0002 U	0.00015 J					
Molybdenum	mg/L	0.011		0.011		0.0061		0.011	0.011	0.01					
Nickel	mg/L														
Oxidation-Reduction Potential, Field	mV	174.2	55.4		127		25.1		39.3	-18.8					
pH, Field	pH units	8.36	8.7		8.01		8.51		8.68	8.79	7.58	7.64	7.76	7.8	7.88
Potassium	mg/L	1.5		0.99 J		2		0.89	0.89 J	1.1		2.9	3.2	3	3
Radium-226	pCi/L	0.188 U		0.0897 U		0.217		0.128 U	0.0445 U	0.23 U					
Radium-226/228	pCi/L	0.842		1.42		0.916 J		1.05	0.601 U	1.02 J					
Radium-228	pCi/L	0.654 U		1.33		0.699 J		0.92 U	0.556 U	0.788					
Redox Potential, Field	mV										208.7				
Selenium	mg/L	0.005 U		0.005 U		0.0011 J		0.005	0.005 U	0.005 U					
Silver	mg/L														
Sodium	mg/L	320		340		300		340	350	340		1100	1100	1000	980
Strontium	mg/L														
Sulfate	mg/L	240		120		490		130	120	120		110	120	100	110
Temperature, Field	deg C	17.7	15.6		14.6		17.5		15.2	17.5	16.7				13
Thallium	mg/L	0.001 U		0.001 U		0.001 U		0.001	0.001 U	0.001 U					
Turbidity, Field	NTU	16.32	11.53		3.45		7.19		5.71	20.67	184.3	46.5		69	85.3
Vanadium	mg/L														
Zinc	mg/L														

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	9910	9910	9910	9910	9910	9910	9910	9910	9910	9910	9910	9910	9910	9910
	Date	2020-09-17	2021-03-17	2021-09-24	2022-07-14	2022-09-14	2022-12-05	2022-12-06	2023-02-24	2023-08-16	2023-08-16	2023-09-14	2023-09-14	2024-02-21	2024-02-21
	Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L	840	870	870	820			810	790				830		
Aluminum	mg/L														
Antimony	mg/L				0.002 U				0.00082 J		0.002 U				0.002 U
Arsenic	mg/L				0.0021 J				0.0052		0.003 J				0.0029 J
Barium	mg/L				0.26				0.24		0.25				0.23
Beryllium	mg/L				0.001 U				0.001 U		0.001 U				0.001 U
Bicarbonate Alkalinity as CaCO3	mg/L	840	870	850	820			800	790				800		
Bicarbonate Alkalinity as HCO3	mg/L														
Boron	mg/L	0.51	0.55	0.52					0.52		0.51				0.51
Bromide	mg/L														
Cadmium	mg/L				0.001 U				0.00023 J		0.001 U				0.001 U
Calcium	mg/L	14	13	15							13				13
Carbonate Alkalinity as CaCO3	mg/L	5 U	5 U	15	5 U			5 U	5 U				25		
Chloride	mg/L	850	810	870		1100							1100		1100
Chromium	mg/L				0.034				0.017		0.009				0.0018 J
Cobalt	mg/L				0.00058 J				0.0011		0.00058 J				0.001 U
Conductivity, Field	uS/cm	4577	4584	4732	51788	5195	5563		5312	5380		5617		5326	
Copper	mg/L														
Dissolved Oxygen, Field	mg/L				1.87	9.33	9.63		10.94	8.95		8.96		9.87	
Dissolved Solids, Total	mg/L	2300	2500	2400		2500							3000		
Fluoride	mg/L	2	1.9	1.9	1.8 J	1.9							1.3		1.6
Iron	mg/L														
Lead	mg/L				0.00048 J				0.0014		0.00067 J				0.001 U
Lithium	mg/L				0.025				0.034		0.037 J				0.029
Magnesium	mg/L	4.3	4.3	4.7	4.3				4.6		4.2				4.1
Manganese	mg/L														
Mercury	mg/L		0.0002 U		0.0002 U				0.0002 U		0.0002 U				0.0002 U
Molybdenum	mg/L				0.017				0.015		0.015				0.014
Nickel	mg/L														
Oxidation-Reduction Potential, Field	mV				27.1	78.9	90.8		72.4	72		237.2		145.3	
pH, Field	pH units	7.8	7.69	7.67	7.55	7.81	7.96		7.93	7.88		9		8.07	
Potassium	mg/L	3	3	2.9	2.9				3.1		2.9				2.7
Radium-226	pCi/L				0.289										
Radium-226/228	pCi/L				0.842 J										
Radium-228	pCi/L				0.553 U										
Redox Potential, Field	mV														
Selenium	mg/L				0.0064				0.011		0.015				0.015
Silver	mg/L														
Sodium	mg/L	980	1000	1100	1100				1100		1200				1200
Strontium	mg/L														
Sulfate	mg/L	94	92	96		120							120		120
Temperature, Field	deg C	14	14	16	15.5	17.9	12.7		12.7	20.1		24.7		16.8	
Thallium	mg/L				0.001 U				0.00066 J		0.001 U				0.001 U
Turbidity, Field	NTU	26	43.6	11.7	18.09	5.9	10.39		97.22	17.09		45.92		4.05	
Vanadium	mg/L														
Zinc	mg/L														

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
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Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	9910	9910	9910	9910	9910	MW-16	MW-17	MW-17	MW-17	MW-17	MW-17	MW-17	MW-17	MW-17
	Date	2024-06-26	2024-06-26	2025-04-22	2025-08-19	2025-11-03	2022-05-05	2020-09-11	2021-03-20	2021-09-19	2022-03-24	2022-05-05	2022-05-05	2022-07-18	2022-08-17
	Sample Type	N	N	N	N	N	N	N	N	N	N	FD	N	N	N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L							270	300	270	270	250	260	220	240
Aluminum	mg/L										0.033 J				
Antimony	mg/L		0.00078 J	0.00068 J	0.00085 J	0.00081 J					0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Arsenic	mg/L		0.0038 J	0.003 J	0.0044 J	0.0045 J					0.027	0.018	0.017	0.0052	0.0028 J
Barium	mg/L		0.23	0.23	0.26	0.25					1.7	2.4	2.2	1.9	2.2
Beryllium	mg/L		0.001 U	0.001 U	0.001 U	0.001 U					0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Bicarbonate Alkalinity as CaCO3	mg/L							270	300	270	270	250	260	220	240
Bicarbonate Alkalinity as HCO3	mg/L														
Boron	mg/L							0.39	0.41	0.44	0.62 J	0.42	0.4	0.32	0.4
Bromide	mg/L														
Cadmium	mg/L		0.001 U	0.001 U	9.4E-05 J	9.3E-05 J					0.0001 U	0.001 U	0.001 U	0.001 U	0.001 U
Calcium	mg/L		14	16	16	17		94	87	96	120	83	78	72	91
Carbonate Alkalinity as CaCO3	mg/L							5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloride	mg/L							4500	4200	4500	4000	4200	4200	4500	4500
Chromium	mg/L		0.0028 J	0.0019 J	0.0015 J	0.005 U					0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Cobalt	mg/L		0.001 U	0.00022 J	0.00036 J	0.00014 J					0.0005 U	0.001 U	0.001 U	0.001 U	0.00058 J
Conductivity, Field	uS/cm	5757					4945	12829	12407	12893	13574	12056	12056	13140	13350
Copper	mg/L										0.005 U				
Dissolved Oxygen, Field	mg/L	8.25					1.13				0.2	0.59	0.59	0.41	0.39
Dissolved Solids, Total	mg/L							7500	7200	7900	6900	6500	5800	4700	6700
Fluoride	mg/L							1.4	1.6	1.7	2.2	1.6	1.7	1.7	1.5
Iron	mg/L										3.4				
Lead	mg/L		0.001 U	0.001 U	0.001 U	0.001 U					0.0005 U	0.001 U	0.001 U	0.001 U	0.001 U
Lithium	mg/L		0.031	0.026	0.029	0.029					0.088	0.08	0.075	0.063	0.079
Magnesium	mg/L		4.1	4.2	4.5	4.6		18	18	18	21	18	18	15	16
Manganese	mg/L										0.4				
Mercury	mg/L		0.0002 U	0.0002 U	0.0002 U	0.0002 U					0.00021 J	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Molybdenum	mg/L		0.015	0.015	0.015	0.015					0.01	0.0091	0.0071	0.006	0.02
Nickel	mg/L										0.0027 J				
Oxidation-Reduction Potential, Field	mV	39					36				-276.6	-351.1	-351.1	-197.5	-138.7
pH, Field	pH units	8.1					7.58	7.29	7.27	7.39	7.29	7.36	7.36	7.3	7.07
Potassium	mg/L		2.6	2.8	3.1	2.9		5.3	5.2	5.5	7.4	5.5	5.2	4.7	5.3
Radium-226	pCi/L				1.51	0.353	0.37 U				2.17	2.18	2.2	2.55	2.73
Radium-226/228	pCi/L				3.4	1.74	1.04 U				5.34	4.91	5.08	5.8	6.7
Radium-228	pCi/L				1.88 G	1.38	0.674 U				3.17	2.73	2.88	3.25	3.97
Redox Potential, Field	mV														
Selenium	mg/L		0.017	0.014	0.01	0.013					0.0013 J	0.005 U	0.005 U	0.005 U	0.005 U
Silver	mg/L										0.001 U				
Sodium	mg/L		1200	1200	1200	1300		2400	2500	2600	2700	2700	2500	2900	2600
Strontium	mg/L										7.3				
Sulfate	mg/L							19	43	47	110	48	60	50 U	28
Temperature, Field	deg C	27.8					14.5	14	14	15	14	14.2	14.2	15.8	16.2
Thallium	mg/L		0.001 U	0.001 U	0.001 U	0.001 U					0.001 U	0.001 U	0.001 U	0.001 U	0.0002 J
Turbidity, Field	NTU	6.63					55.7	1.2	2.7	0	149.3	0.78	0.78	50.86	9.71
Vanadium	mg/L														
Zinc	mg/L										0.011 J				

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
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Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	MW-17	MW-17	MW-17	MW-17	MW-17	MW-17	MW-17	MW-17	MW-17	MW-17	MW-17	MW-17	MW-17	MW-17
	Date	2022-09-19	2022-11-07	2022-11-07	2022-12-08	2022-12-08	2023-02-23	2023-04-04	2023-04-14	2023-09-19	2023-09-19	2024-03-12	2024-03-12	2024-09-19	2024-09-19
	Sample Type	N	N	N	FD	N	N	N	N	N	N	N	N	FD	N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L	230	220	220	210	210	240	260	250		420		540	1100	
Aluminum	mg/L														
Antimony	mg/L		0.002 U		0.002 U	0.002 U	0.002 U	0.002 U	0.002 U		0.002 U		0.002 U	0.00071	
Arsenic	mg/L		0.0022 J		0.0019 J	0.0021 J	0.012	0.0082	0.0094		0.014		0.027	0.027	
Barium	mg/L		2.3		2	2	2	2	2.1		0.61		0.39	0.2	
Beryllium	mg/L		0.001 U		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U		0.001 U		0.001 U	0.0004	
Bicarbonate Alkalinity as CaCO3	mg/L	230	220	220	210	210	240	260	250		420		540	1100	
Bicarbonate Alkalinity as HCO3	mg/L														
Boron	mg/L	0.45		0.37				0.41			0.48		0.73	0.91	
Bromide	mg/L														
Cadmium	mg/L		0.001 U		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U		0.001 U		0.001 U	0.00023	
Calcium	mg/L	78		83				66			100		190	330	
Carbonate Alkalinity as CaCO3	mg/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U		5 U		5 U	5	
Chloride	mg/L	4200		4700				4400			4000		5200	7000	
Chromium	mg/L		0.005 U		0.005 U	0.005 U	0.005 U	0.005 U	0.0015 J		0.005 U		0.0015 J	0.005	
Cobalt	mg/L		0.00033 J		0.00024 J	0.0002 J	0.001 U	0.001 U	0.00025 J		0.00047 J		0.00044 J	0.0015	
Conductivity, Field	uS/cm	13344	12925		12226	12226	12619	12157		10941		14260			20303
Copper	mg/L														
Dissolved Oxygen, Field	mg/L	0.74	0.38		0.41	0.41	0.09	0.37		0.71		1.35			0.41
Dissolved Solids, Total	mg/L	5700		6800				5800			6500		9600	9500	
Fluoride	mg/L	1.7 J	1.7	1.7	1.8	1.8	0.76 J	1.7	1.7		1.3		1.1	5	
Iron	mg/L														
Lead	mg/L		0.001 U		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U		0.001 U		0.001 U	0.001	
Lithium	mg/L		0.076		0.069	0.067	0.074	0.073	0.076		0.087		0.12	0.17	
Magnesium	mg/L	15	16	16	15	14	15	14	14		22		50	90	
Manganese	mg/L														
Mercury	mg/L	0.0002 U	0.0002 U		0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U		0.0002 U		0.0002 U	0.0002	
Molybdenum	mg/L		0.013 B		0.013	0.013	0.0042 J	0.0032 J	0.006		0.025		0.0096	0.011	
Nickel	mg/L														
Oxidation-Reduction Potential, Field	mV	-129.9	-130.2		-131.5	-131.5	-173.7	-143.8		-137.1		-184.1			-157.3
pH, Field	pH units	7.06	7.06		7.11	7.11	7.29	7.2		7.25		7.26			6.8
Potassium	mg/L	5	5.5	5.2	5.3	5	5.1	4.9	5.1		5.5		6.8	9.1	
Radium-226	pCi/L	2.79	2.92		2.78	2.65	2.82	2.66	2.49		0.838		0.849	0.562	
Radium-226/228	pCi/L	6.59 J	6.79		6.44	5.93	5.73	5.67	5.15		1.64 J		1.57 J	1.19	
Radium-228	pCi/L	3.79 J	3.87		3.66	3.28	2.91	3.01	2.66		0.799 J		0.723 J	0.632 U	
Redox Potential, Field	mV														
Selenium	mg/L		0.005 U		0.005 U	0.005 U	0.005 U	0.005 U	0.005 U		0.005 U		0.00093 J	0.0065	
Silver	mg/L														
Sodium	mg/L	2700	2600	2700	2400	2500	2400	2400	2300		2600		3300	4400	
Strontium	mg/L														
Sulfate	mg/L	17		14				13			390		1700	2700	
Temperature, Field	deg C	15.8	15.6		13.9	13.9	15.2	14.9		15.6		16			20.1
Thallium	mg/L		0.001 U		0.001 U	0.001 U	0.00036 J	0.001 U	0.001 U		0.001 U		0.001 U	0.001	
Turbidity, Field	NTU	8.53	9.98		8.44	8.44	11.65	8.18		9.83		35.12			8.28
Vanadium	mg/L														
Zinc	mg/L														

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	MW-17	MW-17	MW-17	MW-17	MW-17	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20
	Date	2024-09-19	2025-03-05	2025-03-05	2025-09-15	2025-09-15	2016-08-23	2016-10-05	2016-12-01	2017-04-25	2017-06-06	2017-07-14	2018-03-26	2019-09-19	2020-03-15
	Sample Type	N	FD	N	FD	N	N	N	N	N	N	N	N	N	N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L	1100	750	770	360	360			259					150	170
Aluminum	mg/L									0.05 U	0.043 J	0.15			
Antimony	mg/L	0.002	0.002 U	0.002 U	0.002 U	0.002 U	4E-05 J	0.0002 U	0.0001 U	0.002 U	0.002 U	0.002 U			
Arsenic	mg/L	0.025	0.014	0.013	0.0061	0.0067	0.00938	0.01	0.00917	0.0048 J	0.0086	0.013			
Barium	mg/L	0.23	0.21	0.21	0.24	0.25	0.0274	0.0228	0.0233	0.025	0.027	0.029			
Beryllium	mg/L	0.00031	0.001 U	0.001 U	0.001 U	0.001 U	0.000234	0.000265	0.000276	0.00032 J	0.00055 J	0.00088 J			
Bicarbonate Alkalinity as CaCO3	mg/L	1100	750	770	360	360								150	170
Bicarbonate Alkalinity as HCO3	mg/L														
Boron	mg/L	0.88	0.73	0.69	0.56 J	0.59 J	0.126	0.272	0.104	0.15 J	0.19 B	0.15		0.12	0.19 U
Bromide	mg/L								0.422	5 U	0.5 U	5 U			
Cadmium	mg/L	0.00011	0.001 U	0.001 U	0.001 U	0.001 U	8E-05	2E-05 J	4E-05 U	0.001 U	0.001 U	0.001 U			
Calcium	mg/L	300	220	200	110	120	495	483	465	500	500	500		470	470
Carbonate Alkalinity as CaCO3	mg/L	5	5 U	5 U	5 U	5 U								5 U	5 U
Chloride	mg/L	7400	7100	7500	5500	4500	60.1	25.2	16.4	11	6.5	8.2 J		1.9	2
Chromium	mg/L	0.005	0.005 U	0.005 U	0.005 U	0.005 U	0.0028	0.0018	0.00121	0.002 U	0.0018 J	0.0025			
Cobalt	mg/L	0.0013	0.00043 J	0.00041 J	0.00062 J	0.00065 J	0.128	0.134	0.143	0.13	0.13	0.14			
Conductivity, Field	uS/cm			24446		14933	2819	3042	2935				2817		2523
Copper	mg/L									0.002 U	0.002 U	0.002 U			
Dissolved Oxygen, Field	mg/L			0.68		0.16	2.93	1.5	4.67				1.76		
Dissolved Solids, Total	mg/L	9600	13000	13000	7100	7200	2660	2710	2620	2500 J	2600	2600 J		2600	2500 J
Fluoride	mg/L	5	0.21 J	0.31 J	1.6	1.6	0.95	1	1	1.2	0.93	0.9		1.3	1.3
Iron	mg/L									27	32	37			
Lead	mg/L	0.001	0.001 U	0.001 U	0.001 U	0.001 U	0.000201	0.00013	3E-05 J	0.001 U	0.001 U	0.00089 J			
Lithium	mg/L	0.16	0.15	0.14	0.087	0.095	0.174	0.171	0.188	0.16	0.16	0.16			
Magnesium	mg/L	84	58	50	24	28			106	100	100	110		110	110
Manganese	mg/L									15	15	16			
Mercury	mg/L	0.0002	0.0002 U	0.0002 U	0.0002 U	0.0002 U	5E-06 U	5E-06 U	5E-06 U	0.0002 U	0.0002 U	0.0002 U			
Molybdenum	mg/L	0.011	0.0067	0.0064	0.012	0.012	0.0089	0.00543	0.00249	0.0016 J	0.002 J	0.0027 J			
Nickel	mg/L									0.1	0.11	0.12			
Oxidation-Reduction Potential, Field	mV			-114.2		-151.8									
pH, Field	pH units			6.99		7.11	6.88	6.52	6.5	6.51	6.52	6.51	6.56	6.35	6.4
Potassium	mg/L	8.9	7.5	7.1	5.6	5.8			9.01	7.8	7.8	8		6.4	6.4
Radium-226	pCi/L	0.418	0.497	0.513	0.369 J	0.653 J	0.31	0.344	0.322	0.181	0.192	0.327			
Radium-226/228	pCi/L	0.61 U	0.637	0.627	1.52 J	2.03 J	0.684	1.494	0.866	0.594	0.425	0.73			
Radium-228	pCi/L	0.192 U	0.14 U	0.114 U	1.15	1.37	0.374	1.15	0.544	0.413	0.234 U	0.404			
Redox Potential, Field	mV						-41	-55.5	-47.5						
Selenium	mg/L	0.0059	0.005 U	0.005 U	0.005 U	0.005 U	0.0001 J	0.0002 J	0.0001 J	0.005 U	0.005 U	0.0015 J			
Silver	mg/L									0.001 U	0.001 U	0.001 U			
Sodium	mg/L	4500	3800	3600	2800	2800			64.6	52	51 B	53 B		26	28
Strontium	mg/L								3.08	3.6	3.3 B	3.2 B			
Sulfate	mg/L	2800	R	R	520	500	1610	1810	1610	2200	1700	1600		1700	1800
Temperature, Field	deg C			15.3		17.6	16.53	15.4	12.1				12.4		12
Thallium	mg/L	0.001	0.001 U	0.001 U	0.001 U	0.001 U	0.000598	0.00033	9E-05 J	0.001 U	0.001 U	0.001 U			
Turbidity, Field	NTU			11.51		6.23	42.4	9.6	9.2	6.1	1.4	4.8	1	67	456
Vanadium	mg/L														
Zinc	mg/L									0.02 U	0.02	0.038			

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20
	Date	2020-03-24	2020-09-15	2021-03-19	2021-09-20	2022-03-30	2022-05-03	2022-07-14	2022-08-16	2022-09-13	2022-09-13	2022-10-18	2022-10-25	2023-03-27	2023-09-14
	Sample Type	N	N	N	N	N	N	N	N	FD	N	N	N	N	N
Analyte	Unit														
Alkalinity, Total as CaCO3	mg/L	170	160	160	170	160	160	160	150	160	160	160	170	170	
Aluminum	mg/L					0.05 U									
Antimony	mg/L					0.002 U	0.002 U	0.002 U	0.002 U			0.002 U		0.002 U	
Arsenic	mg/L					0.0018 J	0.005 U	0.0017 J	0.00076 J			0.005 U		0.005 U	
Barium	mg/L					0.017	0.018	0.016	0.016			0.014		0.018	
Beryllium	mg/L					0.001 U	0.001 U	0.001 U	0.001 U			0.001 U		0.001 U	
Bicarbonate Alkalinity as CaCO3	mg/L	170	160	160	170	160	160	160	150	160	160	160	170	170	
Bicarbonate Alkalinity as HCO3	mg/L														
Boron	mg/L	0.16	0.1	0.23	0.099 J	0.2 U				0.12	0.12			0.19	
Bromide	mg/L														
Cadmium	mg/L					0.0001 U	0.001 U	0.00022 J	0.00037 J			0.001 U		0.001 U	
Calcium	mg/L	470	450	420	440	510				450	440			470	
Carbonate Alkalinity as CaCO3	mg/L	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	
Chloride	mg/L	2.1	1.8	1.8	1.8	1.8				1.8 J	1.8 J		1.8	1.7	
Chromium	mg/L					0.005 U	0.005 U	0.005 U	0.005 U			0.005 U		0.005 U	
Cobalt	mg/L					0.19	0.2	0.15	0.21			0.19		0.19	
Conductivity, Field	uS/cm	2455	2402	2428	2360	2581	2264	2458	2469	2437	2437	2406	2311	2539	1947
Copper	mg/L					0.005 U									
Dissolved Oxygen, Field	mg/L					6.78	3.09	1.83	0.42	0.61	0.61	1.2	0.72	1.08	1.07
Dissolved Solids, Total	mg/L	2100	2100	2300	2100	2100				2100 J	2000 J		2100	2200	
Fluoride	mg/L	1.2	1.3	1.3	1.4	1.5	1.6	1.4 J	1.5	1.4	1.4	1.4	1.4	1.4	
Iron	mg/L					10									
Lead	mg/L					0.0005 U	0.001 U	0.001 U	0.001 U			0.001 U		0.001 U	
Lithium	mg/L					0.18	0.21	0.15	0.18			0.17		0.19	
Magnesium	mg/L	110	100	94	100	100	100	89	110	100	100	93		100	
Manganese	mg/L					16									
Mercury	mg/L					0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U		0.0002 U	
Molybdenum	mg/L					0.002 U	0.005 U	0.005 U	0.005 U			0.005 U		0.005 U	
Nickel	mg/L					0.16									
Oxidation-Reduction Potential, Field	mV					179.5	80.2	110.2	154.9	111.9	111.9	193.4	180.4	-33.5	6.9
pH, Field	pH units	6.81	6.36	6.38	6.37	6.18	6.19	6.14	6.28	6.12	6.12	6.05	6.22	6.64	6
Potassium	mg/L	6.4	5.6	5.3	5.4	5.9 J	5.7	4.5	5.5	5.4	5.3	5		5.5	
Radium-226	pCi/L					0.00138 U	0.0886 U	0.147 U	0.108	0.0656 U	0.0352 U	0.202		0.0987 U	
Radium-226/228	pCi/L					0.618 U	0.23 U	0.852	0.383 U	0.538	0.442	-0.119 U		0.595	
Radium-228	pCi/L					0.617 U	0.142 U	0.705 J	0.275 U	0.472	0.406	-0.321 U		0.496 U	
Redox Potential, Field	mV														
Selenium	mg/L					0.0013 J	0.0017 J	0.005 U	0.0023 J			0.005 U		0.001 J	
Silver	mg/L					0.0026									
Sodium	mg/L	28	27	25	24	24	22	20	25	23	23	21		24	
Strontium	mg/L					2.4									
Sulfate	mg/L	1700	1500	1500	1600	1500				1700	1700		1600	1500	
Temperature, Field	deg C	13	14	13	14	12	13	15.3	14.5	15.7	15.7	13	14.2	12.8	13.9
Thallium	mg/L					0.00028 J	0.001 U	0.001 U	0.0015 J			0.001 U		0.00054 J	
Turbidity, Field	NTU	248	123	75.1	173	65.7	91.1	145.47	40.59	19.97	19.97	10.21	29.27	13.58	19.71
Vanadium	mg/L														
Zinc	mg/L					0.15									

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
pCi/L = Picocuries per liter
B: Compound was found in the blank and sample.
J: Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.
U: Indicates the analyte was analyzed for but not detected.
Empty cells = Not analyzed

Appendix E
Analytical Data Summary
Fly Ash Reservoir & Residual Waste Landfill
Gavin Power Plant

	Location	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20
	Date	2023-09-14	2024-03-08	2024-03-08	2024-09-30	2024-09-30	2025-03-13	2025-09-22
	Sample Type	N	N	N	N	N	N	N
Analyte	Unit							
Alkalinity, Total as CaCO3	mg/L	170		170		160	170	160
Aluminum	mg/L							
Antimony	mg/L	0.002 U		0.002 U		0.002	0.002 U	0.002 U
Arsenic	mg/L	0.005 U		0.0014 J		0.005	0.005 U	0.005 U
Barium	mg/L	0.017		0.019		0.016	0.016	0.017 J
Beryllium	mg/L	0.001 U		0.001 U		0.001	0.001 U	0.001 U
Bicarbonate Alkalinity as CaCO3	mg/L	170		170		160	170	160
Bicarbonate Alkalinity as HCO3	mg/L							
Boron	mg/L	0.13		0.13		0.16	0.16	0.18 J
Bromide	mg/L							
Cadmium	mg/L	0.001 U		0.001 U		0.001	0.001 U	0.001 U
Calcium	mg/L	480		480		450	460	440
Carbonate Alkalinity as CaCO3	mg/L	5 U		5 U		5	5 U	5 U
Chloride	mg/L	1.5		1.5		1.7	1.6	1.5
Chromium	mg/L	0.005 U		0.005 U		0.005	0.005 U	0.005 U
Cobalt	mg/L	0.21		0.19		0.21	0.19	0.23
Conductivity, Field	uS/cm		2522		2551		2414	2025
Copper	mg/L							
Dissolved Oxygen, Field	mg/L		1.81		0.5		0.52	0.17
Dissolved Solids, Total	mg/L	2300		2100		2300	2300	2200
Fluoride	mg/L	1.3		1.5		1.4	1.3	1.4
Iron	mg/L							
Lead	mg/L	0.001 U		0.001 U		0.001	0.001 U	0.001 U
Lithium	mg/L	0.18		0.18		0.18	0.18	0.2
Magnesium	mg/L	110		110		94	110	110
Manganese	mg/L							
Mercury	mg/L	0.0002 U		0.0002 U		0.0002	0.0002 U	0.0002 U
Molybdenum	mg/L	0.005 U		0.005 U		0.005	0.005 U	0.005 U
Nickel	mg/L							
Oxidation-Reduction Potential, Field	mV		5.4		-69.5		-35	-74.2
pH, Field	pH units		6.21		6.3		6.46	6.38
Potassium	mg/L	5.5		5.5		4.7	5.1	4.9
Radium-226	pCi/L	0.139		0.0931 U		0.136	0.238 U	0.0496 U
Radium-226/228	pCi/L	0.578		0.239 U		0.483 U	0.563	0.246 U
Radium-228	pCi/L	0.44 U		0.146 U		0.347 U	0.325 U	0.196 U
Redox Potential, Field	mV							
Selenium	mg/L	0.005 U		0.005 U		0.005	0.005 U	0.005 U
Silver	mg/L							
Sodium	mg/L	24		25		20	23	25
Strontium	mg/L							
Sulfate	mg/L	1700		1500		1600	1500 J	1600
Temperature, Field	deg C		12.7		16.5		13.5	15
Thallium	mg/L	0.001 U		0.001 U		0.001	0.001 U	0.001 U
Turbidity, Field	NTU		66.18		9.17		17.95	7.35
Vanadium	mg/L							
Zinc	mg/L							

Notes:
FD = Field duplicate sample
N = Normal environmental sample
deg C = Degree Celcius
mg/L = Milligrams per liter
mV = Milivolts
NTU = Nephelometric Turbidity Unit
uS/cm = Microsiemens per centimeter
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B: Compound was found in the blank and sample.
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Empty cells = Not analyzed

APPENDIX F LABORATORY REPORTS

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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620

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JOB DESCRIPTION

Federal CCR Wells

JOB NUMBER

240-219587-1

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

myEOL

Job Notes

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Authorization

Roxanne Cisneros

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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-219587-1
Project/Site: Federal CCR Wells

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
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: 240-219587-1 — Eurofins Cleveland

Job Narrative
240-219587-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The sample was received on 2/28/2025 8:00 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.0°C.

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

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

Gas Flow Proportional Counter
Method 9320_Ra228: Radium-228 Prep Batch 160-706362:
The detection goal was not met for the following sample due to the reduction of sample size required by the presence of matrix interferences (discoloration, turbidity noted by the prep analyst): 2019-06-F-20250226-01 (240-219587-1). Analytical results are reported with the detection limit achieved.

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

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

Method Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-219587-1
Project/Site: Federal CCR Wells

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CLE
6020B	Metals (ICP/MS)	SW846	EET CLE
7470A	Mercury (CVAA)	SW846	EET CLE
2320 B-2021	Alkalinity	SM	EET CLE
2540 C-2020	Solids, Total Dissolved (TDS)	SM	EET CLE
300.0	Anions, Ion Chromatography	EPA	EET CLE
9315	Radium 226 by GFPC	SW846	EET SL
9320	Radium-228 (GFPC)	SW846	EET SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	EET SL
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CLE
7470A	Preparation, Mercury	SW846	EET CLE
PrecSep_0	Preparation, Precipitate Separation	None	EET SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	EET SL

Protocol References:

EPA = US Environmental Protection Agency

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:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

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

Sample Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-219587-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-219587-1	2019-06-F-20250226-01	Water	02/26/25 12:03	02/28/25 08:00

Detection Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-219587-1

Client Sample ID: 2019-06-F-20250226-01

Lab Sample ID: 240-219587-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	230		100	57	ug/L	1		6010D	Total Recoverable
Antimony	1.5	J	2.0	0.57	ug/L	1		6020B	Total Recoverable
Arsenic	2.8	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	200		5.0	0.77	ug/L	1		6020B	Total Recoverable
Calcium	100000	F1	1000	250	ug/L	1		6020B	Total Recoverable
Chromium	14		5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	2.4		1.0	0.086	ug/L	1		6020B	Total Recoverable
Lead	1.3		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	140		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	30000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	36		5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	6600		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	2200000		10000	8800	ug/L	10		6020B	Total Recoverable
Total Alkalinity	210		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	210		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	3900		1000	780	mg/L	1		2540 C-2020	Total/NA
Chloride	3400		50	6.4	mg/L	50		300.0	Total/NA
Fluoride	1.2		0.25	0.12	mg/L	5		300.0	Total/NA
Sulfate	360		5.0	1.7	mg/L	5		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 2019-06-F-20250226-01
Date Collected: 02/26/25 12:03
Date Received: 02/28/25 08:00

Lab Sample ID: 240-219587-1
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	230		100	57	ug/L		03/04/25 14:00	03/08/25 02:23	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.5	J	2.0	0.57	ug/L		03/04/25 14:00	03/05/25 18:41	1
Arsenic	2.8	J	5.0	0.75	ug/L		03/04/25 14:00	03/05/25 18:41	1
Barium	200		5.0	0.77	ug/L		03/04/25 14:00	03/05/25 18:41	1
Beryllium	ND		1.0	0.27	ug/L		03/04/25 14:00	03/05/25 18:41	1
Cadmium	ND		1.0	0.077	ug/L		03/04/25 14:00	03/05/25 18:41	1
Calcium	100000	F1	1000	250	ug/L		03/04/25 14:00	03/05/25 18:41	1
Chromium	14		5.0	1.2	ug/L		03/04/25 14:00	03/05/25 18:41	1
Cobalt	2.4		1.0	0.086	ug/L		03/04/25 14:00	03/05/25 18:41	1
Lead	1.3		1.0	0.45	ug/L		03/04/25 14:00	03/05/25 18:41	1
Lithium	140		8.0	3.4	ug/L		03/04/25 14:00	03/05/25 18:41	1
Magnesium	30000		1000	61	ug/L		03/04/25 14:00	03/05/25 18:41	1
Molybdenum	36		5.0	1.1	ug/L		03/04/25 14:00	03/05/25 18:41	1
Potassium	6600		1000	220	ug/L		03/04/25 14:00	03/05/25 18:41	1
Selenium	ND		5.0	0.89	ug/L		03/04/25 14:00	03/05/25 18:41	1
Sodium	2200000		10000	8800	ug/L		03/04/25 14:00	03/06/25 14:06	10
Thallium	ND		1.0	0.51	ug/L		03/04/25 14:00	03/05/25 18:41	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		03/04/25 14:00	03/05/25 14:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	210		5.0	2.6	mg/L			03/11/25 19:12	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	210		5.0	2.6	mg/L			03/11/25 19:12	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			03/11/25 19:12	1
Total Dissolved Solids (SM 2540 C-2020)	3900		1000	780	mg/L			03/05/25 15:39	1
Chloride (EPA 300.0)	3400		50	6.4	mg/L			03/06/25 06:29	50
Fluoride (EPA 300.0)	1.2		0.25	0.12	mg/L			03/06/25 06:08	5
Sulfate (EPA 300.0)	360		5.0	1.7	mg/L			03/06/25 06:08	5

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.915	U	0.679	0.684	1.00	0.945	pCi/L	03/06/25 07:41	04/07/25 15:16	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*52.9*		*30 - 110*	*03/06/25 07:41*	*04/07/25 15:16*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	2.66	G	1.33	1.35	1.00	1.82	pCi/L	03/06/25 07:43	04/07/25 12:00	1

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-219587-1

Client Sample ID: 2019-06-F-20250226-01
Date Collected: 02/26/25 12:03
Date Received: 02/28/25 08:00

Lab Sample ID: 240-219587-1
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*52.9*		*30 - 110*	*03/06/25 07:43*	*04/07/25 12:00*	*1*
Y Carrier	*79.6*		*30 - 110*	*03/06/25 07:43*	*04/07/25 12:00*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**3.58**		1.49	1.51	5.00	1.82	pCi/L		04/08/25 16:30	1

Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-219587-1

Method: 9315 - Radium 226 by GFPC

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)							
		Ba							
Lab Sample ID	Client Sample ID	(30-110)							
240-219587-1	2019-06-F-20250226-01	52.9							
LCS 160-706361/2-A	Lab Control Sample	75.0							
MB 160-706361/1-A	Method Blank	72.9							

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	(30-110)	(30-110)						
240-219587-1	2019-06-F-20250226-01	52.9	79.6						

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-646819/1-A
Matrix: Water
Analysis Batch: 647323

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 646819

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		03/04/25 14:00	03/08/25 02:14	1

Lab Sample ID: LCS 240-646819/2-A
Matrix: Water
Analysis Batch: 647323

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 646819

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Boron			1000	1080		ug/L		108	80 - 120		

Lab Sample ID: 240-219587-1 MS
Matrix: Water
Analysis Batch: 647323

Client Sample ID: 2019-06-F-20250226-01
Prep Type: Total Recoverable
Prep Batch: 646819

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Boron	230		1000	1320		ug/L		109	75 - 125		

Lab Sample ID: 240-219587-1 MSD
Matrix: Water
Analysis Batch: 647323

Client Sample ID: 2019-06-F-20250226-01
Prep Type: Total Recoverable
Prep Batch: 646819

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	230		1000	1340		ug/L		111	75 - 125	1	20

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-646819/1-A
Matrix: Water
Analysis Batch: 647046

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 646819

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		03/04/25 14:00	03/05/25 16:41	1
Arsenic	ND		5.0	0.75	ug/L		03/04/25 14:00	03/05/25 16:41	1
Barium	ND		5.0	0.77	ug/L		03/04/25 14:00	03/05/25 16:41	1
Beryllium	ND		1.0	0.27	ug/L		03/04/25 14:00	03/05/25 16:41	1
Cadmium	ND		1.0	0.077	ug/L		03/04/25 14:00	03/05/25 16:41	1
Calcium	ND		1000	250	ug/L		03/04/25 14:00	03/05/25 16:41	1
Chromium	ND		5.0	1.2	ug/L		03/04/25 14:00	03/05/25 16:41	1
Cobalt	ND		1.0	0.086	ug/L		03/04/25 14:00	03/05/25 16:41	1
Lead	ND		1.0	0.45	ug/L		03/04/25 14:00	03/05/25 16:41	1
Lithium	ND		8.0	3.4	ug/L		03/04/25 14:00	03/05/25 16:41	1
Magnesium	ND		1000	61	ug/L		03/04/25 14:00	03/05/25 16:41	1
Molybdenum	ND		5.0	1.1	ug/L		03/04/25 14:00	03/05/25 16:41	1
Potassium	ND		1000	220	ug/L		03/04/25 14:00	03/05/25 16:41	1
Selenium	ND		5.0	0.89	ug/L		03/04/25 14:00	03/05/25 16:41	1
Sodium	ND		1000	880	ug/L		03/04/25 14:00	03/05/25 16:41	1
Thallium	ND		1.0	0.51	ug/L		03/04/25 14:00	03/05/25 16:41	1

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

Lab Sample ID: LCS 240-646819/3-A
Matrix: Water
Analysis Batch: 647046

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 646819

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	98.7		ug/L		99	80 - 120
Arsenic	1000	1010		ug/L		101	80 - 120
Barium	1000	976		ug/L		98	80 - 120
Beryllium	500	491		ug/L		98	80 - 120
Cadmium	500	478		ug/L		96	80 - 120
Calcium	25000	25200		ug/L		101	80 - 120
Chromium	500	498		ug/L		100	80 - 120
Cobalt	500	481		ug/L		96	80 - 120
Lead	500	522		ug/L		104	80 - 120
Lithium	500	461		ug/L		92	80 - 120
Magnesium	25000	25500		ug/L		102	80 - 120
Molybdenum	500	487		ug/L		97	80 - 120
Potassium	25000	26700		ug/L		107	80 - 120
Selenium	1000	985		ug/L		98	80 - 120
Sodium	25000	25600		ug/L		102	80 - 120
Thallium	1000	1060		ug/L		106	80 - 120

Lab Sample ID: 240-219587-1 MS
Matrix: Water
Analysis Batch: 647046

Client Sample ID: 2019-06-F-20250226-01
Prep Type: Total Recoverable
Prep Batch: 646819

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	1.5	J	100	102		ug/L		100	80 - 120
Arsenic	2.8	J	1000	1060		ug/L		105	80 - 120
Barium	200		1000	1190		ug/L		99	80 - 120
Beryllium	ND		500	495		ug/L		99	80 - 120
Cadmium	ND		500	458		ug/L		92	80 - 120
Calcium	100000	F1	25000	131000	F1	ug/L		124	80 - 120
Chromium	14		500	497		ug/L		97	80 - 120
Cobalt	2.4		500	500		ug/L		99	80 - 120
Lead	1.3		500	517		ug/L		103	80 - 120
Lithium	140		500	600		ug/L		92	80 - 120
Magnesium	30000		25000	55700		ug/L		102	80 - 120
Molybdenum	36		500	547		ug/L		102	80 - 120
Potassium	6600		25000	33200		ug/L		106	80 - 120
Selenium	ND		1000	929		ug/L		93	80 - 120
Thallium	ND		1000	1080		ug/L		108	80 - 120

Lab Sample ID: 240-219587-1 MS
Matrix: Water
Analysis Batch: 647208

Client Sample ID: 2019-06-F-20250226-01
Prep Type: Total Recoverable
Prep Batch: 646819

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sodium	2200000		25000	2270000	4	ug/L		258	80 - 120

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

Lab Sample ID: 240-219587-1 MSD
Matrix: Water
Analysis Batch: 647046

Client Sample ID: 2019-06-F-20250226-01
Prep Type: Total Recoverable
Prep Batch: 646819

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	1.5	J	100	99.7		ug/L		98	80 - 120	2	20
Arsenic	2.8	J	1000	1060		ug/L		106	80 - 120	0	20
Barium	200		1000	1180		ug/L		98	80 - 120	1	20
Beryllium	ND		500	478		ug/L		96	80 - 120	4	20
Cadmium	ND		500	454		ug/L		91	80 - 120	1	20
Calcium	100000	F1	25000	129000		ug/L		118	80 - 120	1	20
Chromium	14		500	499		ug/L		97	80 - 120	0	20
Cobalt	2.4		500	500		ug/L		99	80 - 120	0	20
Lead	1.3		500	519		ug/L		104	80 - 120	0	20
Lithium	140		500	583		ug/L		89	80 - 120	3	20
Magnesium	30000		25000	54300		ug/L		97	80 - 120	2	20
Molybdenum	36		500	544		ug/L		102	80 - 120	0	20
Potassium	6600		25000	33000		ug/L		106	80 - 120	1	20
Selenium	ND		1000	936		ug/L		94	80 - 120	1	20
Thallium	ND		1000	1070		ug/L		107	80 - 120	0	20

Lab Sample ID: 240-219587-1 MSD
Matrix: Water
Analysis Batch: 647208

Client Sample ID: 2019-06-F-20250226-01
Prep Type: Total Recoverable
Prep Batch: 646819

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sodium	2200000		25000	2200000	4	ug/L		-10	80 - 120	3	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-646826/1-A
Matrix: Water
Analysis Batch: 647001

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 646826

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		03/04/25 14:00	03/05/25 14:31	1

Lab Sample ID: LCS 240-646826/2-A
Matrix: Water
Analysis Batch: 647001

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 646826

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			5.00	5.02		ug/L		100	80 - 120		

Lab Sample ID: 240-219587-1 MS
Matrix: Water
Analysis Batch: 647001

Client Sample ID: 2019-06-F-20250226-01
Prep Type: Total/NA
Prep Batch: 646826

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	ND		1.00	1.02		ug/L		102	80 - 120		

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: 240-219587-1 MSD
Matrix: Water
Analysis Batch: 647001

Client Sample ID: 2019-06-F-20250226-01
Prep Type: Total/NA
Prep Batch: 646826

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		1.00	1.02		ug/L		102	80 - 120	1	20

Method: 2320 B-2021 - Alkalinity

Lab Sample ID: MB 240-647973/4
Matrix: Water
Analysis Batch: 647973

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	ND		5.0	2.6	mg/L			03/11/25 18:57	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/11/25 18:57	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/11/25 18:57	1

Lab Sample ID: LCS 240-647973/3
Matrix: Water
Analysis Batch: 647973

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	280	267		mg/L		95	86 - 123

Method: 2540 C-2020 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 240-646997/1
Matrix: Water
Analysis Batch: 646997

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	ND		10	7.8	mg/L			03/05/25 15:39	1

Lab Sample ID: LCS 240-646997/2
Matrix: Water
Analysis Batch: 646997

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	569	550		mg/L		97	80 - 120

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-646882/3
Matrix: Water
Analysis Batch: 646882

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.13	mg/L			03/05/25 16:23	1
Fluoride	ND		0.050	0.024	mg/L			03/05/25 16:23	1
Sulfate	ND		1.0	0.35	mg/L			03/05/25 16:23	1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 240-646882/4
Matrix: Water
Analysis Batch: 646882

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	49.5		mg/L		99	90 - 110
Fluoride	2.50	2.57		mg/L		103	90 - 110
Sulfate	50.0	50.9		mg/L		102	90 - 110

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-706361/1-A
Matrix: Water
Analysis Batch: 711167

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 706361

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.06546	U	0.227	0.227	1.00	0.429	pCi/L	03/06/25 07:41	04/07/25 15:15	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*72.9*		*30 - 110*	*03/06/25 07:41*	*04/07/25 15:15*	*1*

Lab Sample ID: LCS 160-706361/2-A
Matrix: Water
Analysis Batch: 711167

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 706361

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226	9.58	7.588		1.15	1.00	0.431	pCi/L	79	75 - 125

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*75.0*		*30 - 110*

Metals

Prep Batch: 646819

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219587-1	2019-06-F-20250226-01	Total Recoverable	Water	3005A	
MB 240-646819/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-646819/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-646819/3-A	Lab Control Sample	Total Recoverable	Water	3005A	
240-219587-1 MS	2019-06-F-20250226-01	Total Recoverable	Water	3005A	
240-219587-1 MS	2019-06-F-20250226-01	Total Recoverable	Water	3005A	
240-219587-1 MSD	2019-06-F-20250226-01	Total Recoverable	Water	3005A	
240-219587-1 MSD	2019-06-F-20250226-01	Total Recoverable	Water	3005A	

Prep Batch: 646826

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219587-1	2019-06-F-20250226-01	Total/NA	Water	7470A	
MB 240-646826/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-646826/2-A	Lab Control Sample	Total/NA	Water	7470A	
240-219587-1 MS	2019-06-F-20250226-01	Total/NA	Water	7470A	
240-219587-1 MSD	2019-06-F-20250226-01	Total/NA	Water	7470A	

Analysis Batch: 647001

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219587-1	2019-06-F-20250226-01	Total/NA	Water	7470A	646826
MB 240-646826/1-A	Method Blank	Total/NA	Water	7470A	646826
LCS 240-646826/2-A	Lab Control Sample	Total/NA	Water	7470A	646826
240-219587-1 MS	2019-06-F-20250226-01	Total/NA	Water	7470A	646826
240-219587-1 MSD	2019-06-F-20250226-01	Total/NA	Water	7470A	646826

Analysis Batch: 647046

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219587-1	2019-06-F-20250226-01	Total Recoverable	Water	6020B	646819
MB 240-646819/1-A	Method Blank	Total Recoverable	Water	6020B	646819
LCS 240-646819/3-A	Lab Control Sample	Total Recoverable	Water	6020B	646819
240-219587-1 MS	2019-06-F-20250226-01	Total Recoverable	Water	6020B	646819
240-219587-1 MSD	2019-06-F-20250226-01	Total Recoverable	Water	6020B	646819

Analysis Batch: 647208

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219587-1	2019-06-F-20250226-01	Total Recoverable	Water	6020B	646819
240-219587-1 MS	2019-06-F-20250226-01	Total Recoverable	Water	6020B	646819
240-219587-1 MSD	2019-06-F-20250226-01	Total Recoverable	Water	6020B	646819

Analysis Batch: 647323

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219587-1	2019-06-F-20250226-01	Total Recoverable	Water	6010D	646819
MB 240-646819/1-A	Method Blank	Total Recoverable	Water	6010D	646819
LCS 240-646819/2-A	Lab Control Sample	Total Recoverable	Water	6010D	646819
240-219587-1 MS	2019-06-F-20250226-01	Total Recoverable	Water	6010D	646819
240-219587-1 MSD	2019-06-F-20250226-01	Total Recoverable	Water	6010D	646819

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-219587-1

General Chemistry

Analysis Batch: 646882

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219587-1	2019-06-F-20250226-01	Total/NA	Water	300.0	
240-219587-1	2019-06-F-20250226-01	Total/NA	Water	300.0	
MB 240-646882/3	Method Blank	Total/NA	Water	300.0	
LCS 240-646882/4	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 646997

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219587-1	2019-06-F-20250226-01	Total/NA	Water	2540 C-2020	
MB 240-646997/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-646997/2	Lab Control Sample	Total/NA	Water	2540 C-2020	

Analysis Batch: 647973

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219587-1	2019-06-F-20250226-01	Total/NA	Water	2320 B-2021	
MB 240-647973/4	Method Blank	Total/NA	Water	2320 B-2021	
LCS 240-647973/3	Lab Control Sample	Total/NA	Water	2320 B-2021	

Rad

Prep Batch: 706361

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219587-1	2019-06-F-20250226-01	Total/NA	Water	PrecSep-21	
MB 160-706361/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-706361/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 706362

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219587-1	2019-06-F-20250226-01	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-219587-1
Project/Site: Federal CCR Wells

Client Sample ID: 2019-06-F-20250226-01
Lab Sample ID: 240-219587-1

Date Collected: 02/26/25 12:03
Matrix: Water
Date Received: 02/28/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			646819	MN7X	EET CLE	03/04/25 14:00
Total Recoverable	Analysis	6010D		1	647323	AJC	EET CLE	03/08/25 02:23
Total Recoverable	Prep	3005A			646819	MN7X	EET CLE	03/04/25 14:00
Total Recoverable	Analysis	6020B		10	647208	RKT	EET CLE	03/06/25 14:06
Total Recoverable	Prep	3005A			646819	MN7X	EET CLE	03/04/25 14:00
Total Recoverable	Analysis	6020B		1	647046	S4FJ	EET CLE	03/05/25 18:41
Total/NA	Prep	7470A			646826	MN7X	EET CLE	03/04/25 14:00
Total/NA	Analysis	7470A		1	647001	GEV	EET CLE	03/05/25 14:34
Total/NA	Analysis	2320 B-2021		1	647973	PQD2	EET CLE	03/11/25 19:12
Total/NA	Analysis	2540 C-2020		1	646997	AAP	EET CLE	03/05/25 15:39
Total/NA	Analysis	300.0		5	646882	JMR	EET CLE	03/06/25 06:08
Total/NA	Analysis	300.0		50	646882	JMR	EET CLE	03/06/25 06:29
Total/NA	Prep	PrecSep-21			706361	OGC	EET SL	03/06/25 07:41
Total/NA	Analysis	9315		1	711167	CMM	EET SL	04/07/25 15:16
Total/NA	Prep	PrecSep_0			706362	OGC	EET SL	03/06/25 07:43
Total/NA	Analysis	9320		1	710986	CMM	EET SL	04/07/25 12:00
Total/NA	Analysis	Ra226_Ra228		1	711562	FLC	EET SL	04/08/25 16:30

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

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

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-219587-1
Project/Site: Federal CCR Wells

Laboratory: Eurofins Cleveland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0806	12-31-26
Georgia	State	4062	02-27-26
Illinois	NELAP	200004	08-31-25
Iowa	State	421	06-01-25
Kansas	NELAP	E-10336	01-31-26
Kentucky (UST)	State	112225	02-28-26
Kentucky (WW)	State	KY98016	12-31-25
Minnesota	NELAP	039-999-348	12-31-25
New Hampshire	NELAP	225024	09-30-25
New Jersey	NELAP	OH001	07-03-25
New York	NELAP	10975	03-31-25
Ohio	State	8303	11-04-25
Ohio VAP	State	ORELAP 4062	02-28-26
Oregon	NELAP	4062	02-27-26
Pennsylvania	NELAP	68-00340	03-18-25
Texas	NELAP	T104704517-22-19	08-31-25
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	09-14-25
West Virginia DEP	State	210	12-31-25
Wisconsin	State	399167560	08-31-25

Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-25
ANAB	Dept. of Defense ELAP	L2305	04-06-27
ANAB	Dept. of Energy	L2305.01	04-06-27
ANAB	ISO/IEC 17025	L2305	04-08-25
Arizona	State	AZ0813	12-08-25
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-25
Connecticut	State	PH-0241	03-31-25 *
Florida	NELAP	E87689	06-30-25
HI - RadChem Recognition	State	n/a	06-30-25
Illinois	NELAP	200023	11-30-25
Iowa	State	373	12-01-26
Kansas	NELAP	E-10236	10-31-25
Kentucky (DW)	State	KY90125	12-31-25
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-25
Louisiana (All)	NELAP	106151	06-30-25
Louisiana (DW)	State	LA011	12-31-25
Maryland	State	310	09-30-25
Massachusetts	State	M-MO054	06-30-25
MI - RadChem Recognition	State	9005	06-30-25
Missouri	State	780	06-30-25
Nevada	State	MO00054	07-31-25
New Jersey	NELAP	MO002	06-30-25
New Mexico	State	MO00054	06-30-25

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-219587-1
Project/Site: Federal CCR Wells

Laboratory: Eurofins St. Louis (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
North Carolina (DW)	State	29700	07-31-25
North Dakota	State	R-207	06-30-25
Oklahoma	NELAP	9997	08-31-25
Oregon	NELAP	4157	09-01-25
Pennsylvania	NELAP	68-00540	02-28-26
South Carolina	State	85002	06-30-25
Texas	NELAP	T104704193	07-31-25
US Fish & Wildlife	US Federal Programs	058448	07-31-25
USDA	US Federal Programs	525-23-138-94730	05-18-26
Utah	NELAP	MO00054	07-31-25
Virginia	NELAP	460230	06-14-25
Washington	State	C592	08-30-25
West Virginia DEP	State	381	10-31-25

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

2.0 12.0

Columbus
209

Chain of Custody Record

eurofins
Environment Testing

Client Information	Sampler: Bobby Gusto	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s):	COC No. 240-111832-39818.1
Client Contact: Taylor Huffman	Phone: 740-373-4305	E-Mail: roxanne.cisneros@et.eurofinsus.com	State of Origin:	Page: Page 1 of 8
Company: Lightstone Generation Gavin Power LLC	PWSID			Job #:
Address: 7397 OH-7	Due Date Requested:			
City: Cheshire	TAT Requested (days):			
State, Zip: OH, 45620	Compliance Project: Δ Yes Δ No			
Phone: 740-925-3171(Tel)	PO #: 2935505			
Email: taylor.huffman@lightstonegen.com	WO #:			
Project Name: Gavin CCR	Project #: 24019633			
Site: Gavin	SSOW#:			

Analysis Requested

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=wastestoil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B, 6020, 7470A	2540C_Calcd - TDS	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	300.0_28D - Chloride, Fluoride & Sulfate	2320B - (MOD) Alkalinity	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	D	N	D	N	N	X	
2019-06-F-20250226-01	2-26-25	1203	G	Water	N		1	1	2	1	1		
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									

240-219587 COC

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

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

	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	2-26-25 / 0945	KEMA	Cameron Mosby	02/26/25 1205	Eurofins
Relinquished by:	02/26/25 1256	Eurofins	MALISSA LOAR	2/28/25 8AM	
Relinquished by:			Received by:	Date/Time:	Company

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

Ver: 06/08/2021

Eurofins – Cleveland Sample Receipt Form/Narrative **Login # :**
Barberton Facility

Client Gavin Site Name
Cooler Received on 2/28/25 Opened on 2/28/25
Cooler unpacked by: MALISSA LOAR
FedEx: 1st Grd Exp UPS FAS (Waypoint) Client Drop Off Eurofins Courier Other
Receipt After-hours Drop-off Date/Time Storage Location
Eurofins Cooler # 22 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 # 13 (CF 0 °C) Observed Cooler Temp. 2.0 °C Corrected Cooler Temp 2.0 °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity	(Yes) No	**Tests that are not checked for pH by Receiving:** VOAs, Oil and Grease, TOC
-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# HC448976
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)	

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

2/28/2025

Login Container Summary Report

240-219587

4/8/2025

Temperature readings _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
2019-06-F-20250226-01	240-219587-A-1	Plastic 250ml - unpreserved				
2019-06-F-20250226-01	240-219587-B-1	Plastic 250ml - unpreserved				
2019-06-F-20250226-01	240-219587-C-1	Plastic 500ml - unpreserved				
2019-06-F-20250226-01	240-219587-D-1	Plastic 500ml - with Nitric Acid	<2			
2019-06-F-20250226-01	240-219587-E-1	Plastic 500ml - with Nitric Acid	<2			
2019-06-F-20250226-01	240-219587-F-1	Plastic 1 liter - Nitric Acid	<2			
2019-06-F-20250226-01	240-219587-G-1	Plastic 1 liter - Nitric Acid	<2			

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s): N/A	COC No: 240-199108.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: roxanne.cisneros@et.eurofinsus.com	State of Origin: Ohio	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): N/A		Job #: 240-219587-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 4/1/2025			
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Federal CCR Wells	Project #: 24019633			
Site: N/A	SSOW#: N/A			

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9320_Ra228/PrecSep_0 Radium-228 (GFPC)	9315_Ra226/PrecSep_21 Radium-226 (GFPC)	Ra226Ra228_GFPC/ Combined Radium-226 and Radium-228	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
2019-06-F-20250226-01 (240-219587-1)	2/26/25	12:03 Eastern	G	Water			X	X	X	2	

Analysis Requested

Preservation Codes: -

Other: N/A

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

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

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by:	Date/Time: 4/8/25	Company: Eurc	Received by: M. Pinette
Relinquished by:	Date/Time:	Company	Received by: Meadow Pinette
Relinquished by:	Date/Time:	Company	Received by:

Date/Time: MAR 0 3 2025 0815 Company

Date/Time: Company

Date/Time: Company

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

Ver: 10/10/2024

4/8/2025

Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-219587-1

Login Number: 219587
List Number: 2
Creator: Pinette, Meadow L

List Source: Eurofins St. Louis
List Creation: 03/03/25 10:42 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?	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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620

Generated 4/4/2025 4:19:33 PM

JOB DESCRIPTION

Gavin CCR

JOB NUMBER

240-219836-1

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization

Roxanne Cisneros

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4/4/2025 4:19:33 PM

Authorized for release by
Roxanne Cisneros, Senior Project Manager
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(330)497-9396

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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.

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: 240-219836-1 — Eurofins Cleveland

Job Narrative
240-219836-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 3/5/2025 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.8°C and 1.8°C.

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

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

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

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

Method Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Gavin CCR

Job ID: 240-219836-1

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CLE
6020B	Metals (ICP/MS)	SW846	EET CLE
7470A	Mercury (CVAA)	SW846	EET CLE
2320 B-2021	Alkalinity	SM	EET CLE
2540 C-2020	Solids, Total Dissolved (TDS)	SM	EET CLE
300.0	Anions, Ion Chromatography	EPA	EET CLE
9315	Radium 226 by GFPC	SW846	EET SL
9320	Radium-228 (GFPC)	SW846	EET SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	EET SL
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CLE
7470A	Preparation, Mercury	SW846	EET CLE
PrecSep_0	Preparation, Precipitate Separation	None	EET SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	EET SL

Protocol References:

EPA = US Environmental Protection Agency

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:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

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

Sample Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Gavin CCR

Job ID: 240-219836-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-219836-1	2022-05-F-20250227-01	Water	02/27/25 14:07	03/05/25 08:00
240-219836-2	DUP-001-F-20250227-01	Water	02/27/25 00:00	03/05/25 08:00
240-219836-3	2022-04-F-20250228-01	Water	02/28/25 13:52	03/05/25 08:00

Detection Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Gavin CCR

Job ID: 240-219836-1

Client Sample ID: 2022-05-F-20250227-01 — Lab Sample ID: 240-219836-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	380		100	57	ug/L	1		6010D	Total Recoverable
Antimony	0.69	J	2.0	0.57	ug/L	1		6020B	Total Recoverable
Arsenic	4.1	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	1900		5.0	0.77	ug/L	1		6020B	Total Recoverable
Cadmium	0.13	J	1.0	0.077	ug/L	1		6020B	Total Recoverable
Calcium	66000		1000	250	ug/L	1		6020B	Total Recoverable
Cobalt	0.89	J	1.0	0.086	ug/L	1		6020B	Total Recoverable
Lead	0.45	J	1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	77		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	22000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	35		5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	5800		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	2700000		10000	8800	ug/L	10		6020B	Total Recoverable
Thallium	0.58	J	1.0	0.51	ug/L	1		6020B	Total Recoverable
Total Alkalinity	260		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	260		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	7100		100	78	mg/L	1		2540 C-2020	Total/NA
Chloride	4400		50	6.4	mg/L	50		300.0	Total/NA
Fluoride	1.2		0.25	0.12	mg/L	5		300.0	Total/NA
Sulfate	63		5.0	1.7	mg/L	5		300.0	Total/NA

Client Sample ID: DUP-001-F-20250227-01 — Lab Sample ID: 240-219836-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	370		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	3.1	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	1800	F1	5.0	0.77	ug/L	1		6020B	Total Recoverable
Calcium	62000		1000	250	ug/L	1		6020B	Total Recoverable
Cobalt	0.69	J	1.0	0.086	ug/L	1		6020B	Total Recoverable
Lithium	70		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	21000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	36		5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	5600		1000	220	ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland

Client Sample ID: DUP-001-F-20250227-01 (Continued)

Lab Sample ID: 240-219836-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	2600000		10000	8800	ug/L	10		6020B	Total Recoverable
Total Alkalinity	260		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	240		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Carbonate Alkalinity as CaCO3	19		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	7000		100	78	mg/L	1		2540 C-2020	Total/NA
Chloride	3900		50	6.4	mg/L	50		300.0	Total/NA
Fluoride	1.2		0.25	0.12	mg/L	5		300.0	Total/NA
Sulfate	64		5.0	1.7	mg/L	5		300.0	Total/NA

Client Sample ID: 2022-04-F-20250228-01

Lab Sample ID: 240-219836-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	730		100	57	ug/L	1		6010D	Total Recoverable
Antimony	0.88	J	2.0	0.57	ug/L	1		6020B	Total Recoverable
Arsenic	1.3	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	81		5.0	0.77	ug/L	1		6020B	Total Recoverable
Cadmium	0.13	J	1.0	0.077	ug/L	1		6020B	Total Recoverable
Calcium	110000		1000	250	ug/L	1		6020B	Total Recoverable
Cobalt	0.48	J	1.0	0.086	ug/L	1		6020B	Total Recoverable
Lithium	25		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	33000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	1.9	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	4200		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	110000		1000	880	ug/L	1		6020B	Total Recoverable
Total Alkalinity	490		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	490		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	660		10	7.8	mg/L	1		2540 C-2020	Total/NA
Chloride	34		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.12		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	100		1.0	0.35	mg/L	1		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 2022-05-F-20250227-01
Date Collected: 02/27/25 14:07
Date Received: 03/05/25 08:00

Lab Sample ID: 240-219836-1
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	380		100	57	ug/L		03/06/25 14:00	03/07/25 14:56	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.69	J	2.0	0.57	ug/L		03/06/25 14:00	03/07/25 14:37	1
Arsenic	4.1	J	5.0	0.75	ug/L		03/06/25 14:00	03/07/25 14:37	1
Barium	1900		5.0	0.77	ug/L		03/06/25 14:00	03/07/25 14:37	1
Beryllium	ND		1.0	0.27	ug/L		03/06/25 14:00	03/07/25 14:37	1
Cadmium	0.13	J	1.0	0.077	ug/L		03/06/25 14:00	03/07/25 14:37	1
Calcium	66000		1000	250	ug/L		03/06/25 14:00	03/07/25 14:37	1
Chromium	ND		5.0	1.2	ug/L		03/06/25 14:00	03/07/25 14:37	1
Cobalt	0.89	J	1.0	0.086	ug/L		03/06/25 14:00	03/07/25 14:37	1
Lead	0.45	J	1.0	0.45	ug/L		03/06/25 14:00	03/07/25 14:37	1
Lithium	77		8.0	3.4	ug/L		03/06/25 14:00	03/07/25 14:37	1
Magnesium	22000		1000	61	ug/L		03/06/25 14:00	03/07/25 14:37	1
Molybdenum	35		5.0	1.1	ug/L		03/06/25 14:00	03/07/25 14:37	1
Potassium	5800		1000	220	ug/L		03/06/25 14:00	03/07/25 14:37	1
Selenium	ND		5.0	0.89	ug/L		03/06/25 14:00	03/07/25 14:37	1
Sodium	2700000		10000	8800	ug/L		03/06/25 14:00	03/07/25 20:34	10
Thallium	0.58	J	1.0	0.51	ug/L		03/06/25 14:00	03/07/25 14:37	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		03/06/25 14:00	03/07/25 13:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	260		5.0	2.6	mg/L			03/11/25 00:51	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	260		5.0	2.6	mg/L			03/11/25 00:51	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			03/11/25 00:51	1
Total Dissolved Solids (SM 2540 C-2020)	7100		100	78	mg/L			03/06/25 14:42	1
Chloride (EPA 300.0)	4400		50	6.4	mg/L			03/07/25 18:33	50
Fluoride (EPA 300.0)	1.2		0.25	0.12	mg/L			03/07/25 18:12	5
Sulfate (EPA 300.0)	63		5.0	1.7	mg/L			03/07/25 18:12	5

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	2.14		0.429	0.470	1.00	0.277	pCi/L	03/07/25 07:39	04/02/25 20:59	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*99.5*		*30 - 110*	*03/07/25 07:39*	*04/02/25 20:59*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.78		0.497	0.523	1.00	0.578	pCi/L	03/07/25 07:42	04/02/25 12:03	1

Client Sample ID: 2022-05-F-20250227-01
Date Collected: 02/27/25 14:07
Date Received: 03/05/25 08:00

Lab Sample ID: 240-219836-1
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*99.5*		*30 - 110*	*03/07/25 07:42*	*04/02/25 12:03*	*1*
Y Carrier	*84.1*		*30 - 110*	*03/07/25 07:42*	*04/02/25 12:03*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**3.92**		0.657	0.703	5.00	0.578	pCi/L		04/04/25 15:10	1

Client Sample ID: DUP-001-F-20250227-01
Date Collected: 02/27/25 00:00
Date Received: 03/05/25 08:00

Lab Sample ID: 240-219836-2
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	370		100	57	ug/L		03/06/25 14:00	03/07/25 15:17	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		03/06/25 14:00	03/07/25 14:40	1
Arsenic	3.1	J	5.0	0.75	ug/L		03/06/25 14:00	03/07/25 14:40	1
Barium	1800	F1	5.0	0.77	ug/L		03/06/25 14:00	03/07/25 14:40	1
Beryllium	ND		1.0	0.27	ug/L		03/06/25 14:00	03/07/25 14:40	1
Cadmium	ND		1.0	0.077	ug/L		03/06/25 14:00	03/07/25 14:40	1
Calcium	62000		1000	250	ug/L		03/06/25 14:00	03/07/25 14:40	1
Chromium	ND		5.0	1.2	ug/L		03/06/25 14:00	03/07/25 14:40	1
Cobalt	0.69	J	1.0	0.086	ug/L		03/06/25 14:00	03/07/25 14:40	1
Lead	ND		1.0	0.45	ug/L		03/06/25 14:00	03/07/25 14:40	1
Lithium	70		8.0	3.4	ug/L		03/06/25 14:00	03/07/25 14:40	1
Magnesium	21000		1000	61	ug/L		03/06/25 14:00	03/07/25 14:40	1
Molybdenum	36		5.0	1.1	ug/L		03/06/25 14:00	03/07/25 14:40	1
Potassium	5600		1000	220	ug/L		03/06/25 14:00	03/07/25 14:40	1
Selenium	ND		5.0	0.89	ug/L		03/06/25 14:00	03/07/25 14:40	1
Sodium	2600000		10000	8800	ug/L		03/06/25 14:00	03/07/25 20:42	10
Thallium	ND		1.0	0.51	ug/L		03/06/25 14:00	03/07/25 14:40	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		03/06/25 14:00	03/07/25 13:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	260		5.0	2.6	mg/L			03/11/25 01:02	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	240		5.0	2.6	mg/L			03/11/25 01:02	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	19		5.0	2.6	mg/L			03/11/25 01:02	1
Total Dissolved Solids (SM 2540 C-2020)	7000		100	78	mg/L			03/06/25 14:42	1
Chloride (EPA 300.0)	3900		50	6.4	mg/L			03/07/25 19:15	50
Fluoride (EPA 300.0)	1.2		0.25	0.12	mg/L			03/07/25 18:54	5
Sulfate (EPA 300.0)	64		5.0	1.7	mg/L			03/07/25 18:54	5

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.86		0.412	0.445	1.00	0.269	pCi/L	03/07/25 07:39	04/02/25 20:59	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.9*		*30 - 110*	*03/07/25 07:39*	*04/02/25 20:59*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	2.33		0.723	0.754	1.00	0.875	pCi/L	03/07/25 07:42	04/02/25 14:00	1

Client Sample ID: DUP-001-F-20250227-01
Date Collected: 02/27/25 00:00
Date Received: 03/05/25 08:00

Lab Sample ID: 240-219836-2
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.9*		*30 - 110*	*03/07/25 07:42*	*04/02/25 14:00*	*1*
Y Carrier	*80.0*		*30 - 110*	*03/07/25 07:42*	*04/02/25 14:00*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**4.18**		0.832	0.876	5.00	0.875	pCi/L		04/04/25 15:10	1

Client Sample ID: 2022-04-F-20250228-01
Date Collected: 02/28/25 13:52
Date Received: 03/05/25 08:00

Lab Sample ID: 240-219836-3
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	730		100	57	ug/L		03/06/25 14:00	03/07/25 15:30	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.88	J	2.0	0.57	ug/L		03/06/25 14:00	03/07/25 14:54	1
Arsenic	1.3	J	5.0	0.75	ug/L		03/06/25 14:00	03/07/25 14:54	1
Barium	81		5.0	0.77	ug/L		03/06/25 14:00	03/07/25 14:54	1
Beryllium	ND		1.0	0.27	ug/L		03/06/25 14:00	03/07/25 14:54	1
Cadmium	0.13	J	1.0	0.077	ug/L		03/06/25 14:00	03/07/25 14:54	1
Calcium	110000		1000	250	ug/L		03/06/25 14:00	03/07/25 14:54	1
Chromium	ND		5.0	1.2	ug/L		03/06/25 14:00	03/07/25 14:54	1
Cobalt	0.48	J	1.0	0.086	ug/L		03/06/25 14:00	03/07/25 14:54	1
Lead	ND		1.0	0.45	ug/L		03/06/25 14:00	03/07/25 14:54	1
Lithium	25		8.0	3.4	ug/L		03/06/25 14:00	03/07/25 14:54	1
Magnesium	33000		1000	61	ug/L		03/06/25 14:00	03/07/25 14:54	1
Molybdenum	1.9	J	5.0	1.1	ug/L		03/06/25 14:00	03/07/25 14:54	1
Potassium	4200		1000	220	ug/L		03/06/25 14:00	03/07/25 14:54	1
Selenium	ND		5.0	0.89	ug/L		03/06/25 14:00	03/07/25 14:54	1
Sodium	110000		1000	880	ug/L		03/06/25 14:00	03/07/25 14:54	1
Thallium	ND		1.0	0.51	ug/L		03/06/25 14:00	03/07/25 14:54	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		03/06/25 14:00	03/07/25 13:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	490		5.0	2.6	mg/L			03/11/25 00:42	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	490		5.0	2.6	mg/L			03/11/25 00:42	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			03/11/25 00:42	1
Total Dissolved Solids (SM 2540 C-2020)	660		10	7.8	mg/L			03/06/25 16:22	1
Chloride (EPA 300.0)	34		1.0	0.13	mg/L			03/07/25 19:36	1
Fluoride (EPA 300.0)	0.12		0.050	0.024	mg/L			03/07/25 19:36	1
Sulfate (EPA 300.0)	100		1.0	0.35	mg/L			03/07/25 19:36	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.144	U	0.202	0.202	1.00	0.341	pCi/L	03/07/25 07:39	04/02/25 21:11	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.0*		*30 - 110*	*03/07/25 07:39*	*04/02/25 21:11*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.714	U	0.516	0.520	1.00	0.784	pCi/L	03/07/25 07:42	04/02/25 14:00	1

Client Sample ID: 2022-04-F-20250228-01
Date Collected: 02/28/25 13:52
Date Received: 03/05/25 08:00

Lab Sample ID: 240-219836-3
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.0*		*30 - 110*	*03/07/25 07:42*	*04/02/25 14:00*	*1*
Y Carrier	*83.7*		*30 - 110*	*03/07/25 07:42*	*04/02/25 14:00*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.858**		0.554	0.558	5.00	0.784	pCi/L		04/04/25 15:10	1

Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Gavin CCR

Job ID: 240-219836-1

Method: 9315 - Radium 226 by GFPC

Matrix: Water **Prep Type: Total/NA**

		Percent Yield (Acceptance Limits)
		Ba
Lab Sample ID	Client Sample ID	(30-110)
240-219836-1	2022-05-F-20250227-01	99.5
240-219836-2	DUP-001-F-20250227-01	90.9
240-219836-3	2022-04-F-20250228-01	87.0
LCS 160-706551/2-A	Lab Control Sample	93.2
MB 160-706551/1-A	Method Blank	90.9

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	(30-110)	(30-110)
240-219836-1	2022-05-F-20250227-01	99.5	84.1
240-219836-2	DUP-001-F-20250227-01	90.9	80.0
240-219836-3	2022-04-F-20250228-01	87.0	83.7
LCS 160-706552/2-A	Lab Control Sample	93.2	82.6
MB 160-706552/1-A	Method Blank	90.9	83.0

Tracer/Carrier Legend

Ba = Ba Carrier
Y = Y Carrier

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-647100/1-A
Matrix: Water
Analysis Batch: 647386

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 647100

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		03/06/25 14:00	03/07/25 14:48	1

Lab Sample ID: LCS 240-647100/2-A
Matrix: Water
Analysis Batch: 647386

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 647100

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1000	1050		ug/L		105	80 - 120

Lab Sample ID: 240-219836-1 MS
Matrix: Water
Analysis Batch: 647386

Client Sample ID: 2022-05-F-20250227-01
Prep Type: Total Recoverable
Prep Batch: 647100

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	380		1000	1420		ug/L		105	75 - 125

Lab Sample ID: 240-219836-1 MSD
Matrix: Water
Analysis Batch: 647386

Client Sample ID: 2022-05-F-20250227-01
Prep Type: Total Recoverable
Prep Batch: 647100

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	380		1000	1420		ug/L		105	75 - 125	0	20

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-647100/1-A
Matrix: Water
Analysis Batch: 647317

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 647100

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		03/06/25 14:00	03/07/25 14:31	1
Arsenic	ND		5.0	0.75	ug/L		03/06/25 14:00	03/07/25 14:31	1
Barium	ND		5.0	0.77	ug/L		03/06/25 14:00	03/07/25 14:31	1
Beryllium	ND		1.0	0.27	ug/L		03/06/25 14:00	03/07/25 14:31	1
Cadmium	ND		1.0	0.077	ug/L		03/06/25 14:00	03/07/25 14:31	1
Calcium	ND		1000	250	ug/L		03/06/25 14:00	03/07/25 14:31	1
Chromium	ND		5.0	1.2	ug/L		03/06/25 14:00	03/07/25 14:31	1
Cobalt	ND		1.0	0.086	ug/L		03/06/25 14:00	03/07/25 14:31	1
Lead	ND		1.0	0.45	ug/L		03/06/25 14:00	03/07/25 14:31	1
Lithium	ND		8.0	3.4	ug/L		03/06/25 14:00	03/07/25 14:31	1
Magnesium	ND		1000	61	ug/L		03/06/25 14:00	03/07/25 14:31	1
Molybdenum	ND		5.0	1.1	ug/L		03/06/25 14:00	03/07/25 14:31	1
Potassium	ND		1000	220	ug/L		03/06/25 14:00	03/07/25 14:31	1
Selenium	ND		5.0	0.89	ug/L		03/06/25 14:00	03/07/25 14:31	1
Sodium	ND		1000	880	ug/L		03/06/25 14:00	03/07/25 14:31	1
Thallium	ND		1.0	0.51	ug/L		03/06/25 14:00	03/07/25 14:31	1

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

Lab Sample ID: LCS 240-647100/3-A
Matrix: Water
Analysis Batch: 647317

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 647100

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	101		ug/L		101	80 - 120
Arsenic	2000	1900		ug/L		95	80 - 120
Barium	2000	1840		ug/L		92	80 - 120
Beryllium	1000	898		ug/L		90	80 - 120
Cadmium	1000	896		ug/L		90	80 - 120
Calcium	25000	24200		ug/L		97	80 - 120
Chromium	1000	951		ug/L		95	80 - 120
Cobalt	1000	966		ug/L		97	80 - 120
Lead	1000	1020		ug/L		102	80 - 120
Lithium	1000	918		ug/L		92	80 - 120
Magnesium	25000	24900		ug/L		100	80 - 120
Molybdenum	1000	938		ug/L		94	80 - 120
Potassium	25000	25900		ug/L		104	80 - 120
Selenium	2000	1840		ug/L		92	80 - 120
Sodium	25000	25200		ug/L		101	80 - 120
Thallium	2000	2020		ug/L		101	80 - 120

Lab Sample ID: 240-219836-2 MS
Matrix: Water
Analysis Batch: 647317

Client Sample ID: DUP-001-F-20250227-01
Prep Type: Total Recoverable
Prep Batch: 647100

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	ND		100	105		ug/L		105	80 - 120
Arsenic	3.1	J	1000	1160		ug/L		115	80 - 120
Barium	1800	F1	1000	3090	F1	ug/L		132	80 - 120
Beryllium	ND		500	520		ug/L		104	80 - 120
Cadmium	ND		500	486		ug/L		97	80 - 120
Calcium	62000		25000	88600		ug/L		105	80 - 120
Chromium	ND		500	516		ug/L		103	80 - 120
Cobalt	0.69	J	500	554		ug/L		111	80 - 120
Lead	ND		500	561		ug/L		112	80 - 120
Lithium	70		500	587		ug/L		103	80 - 120
Magnesium	21000		25000	46800		ug/L		102	80 - 120
Molybdenum	36		500	606		ug/L		114	80 - 120
Potassium	5600		25000	32500		ug/L		107	80 - 120
Selenium	ND		1000	1030		ug/L		103	80 - 120
Thallium	ND		1000	1160		ug/L		116	80 - 120

Lab Sample ID: 240-219836-2 MS
Matrix: Water
Analysis Batch: 647317

Client Sample ID: DUP-001-F-20250227-01
Prep Type: Total Recoverable
Prep Batch: 647100

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sodium	2600000		25000	2600000	4	ug/L		-78	80 - 120

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

Lab Sample ID: 240-219836-2 MSD
Matrix: Water
Analysis Batch: 647317

Client Sample ID: DUP-001-F-20250227-01
Prep Type: Total Recoverable
Prep Batch: 647100

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	ND		100	105		ug/L		105	80 - 120	1	20
Arsenic	3.1	J	1000	1140		ug/L		114	80 - 120	2	20
Barium	1800	F1	1000	3020	F1	ug/L		125	80 - 120	2	20
Beryllium	ND		500	516		ug/L		103	80 - 120	1	20
Cadmium	ND		500	471		ug/L		94	80 - 120	3	20
Calcium	62000		25000	89600		ug/L		109	80 - 120	1	20
Chromium	ND		500	503		ug/L		101	80 - 120	3	20
Cobalt	0.69	J	500	544		ug/L		109	80 - 120	2	20
Lead	ND		500	551		ug/L		110	80 - 120	2	20
Lithium	70		500	586		ug/L		103	80 - 120	0	20
Magnesium	21000		25000	47200		ug/L		103	80 - 120	1	20
Molybdenum	36		500	598		ug/L		112	80 - 120	1	20
Potassium	5600		25000	32700		ug/L		108	80 - 120	0	20
Selenium	ND		1000	1010		ug/L		101	80 - 120	3	20
Thallium	ND		1000	1140		ug/L		114	80 - 120	2	20

Lab Sample ID: 240-219836-2 MSD
Matrix: Water
Analysis Batch: 647317

Client Sample ID: DUP-001-F-20250227-01
Prep Type: Total Recoverable
Prep Batch: 647100

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sodium	2600000		25000	2650000	4	ug/L		102	80 - 120	2	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-647098/1-A
Matrix: Water
Analysis Batch: 647339

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 647098

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		03/06/25 14:00	03/07/25 13:16	1

Lab Sample ID: LCS 240-647098/2-A
Matrix: Water
Analysis Batch: 647339

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 647098

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.28		ug/L		106	80 - 120

Method: 2320 B-2021 - Alkalinity

Lab Sample ID: MB 240-647699/106
Matrix: Water
Analysis Batch: 647699

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	ND		5.0	2.6	mg/L			03/11/25 00:38	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/11/25 00:38	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/11/25 00:38	1

Method: 2320 B-2021 - Alkalinity (Continued)

Lab Sample ID: MB 240-647699/86
Matrix: Water
Analysis Batch: 647699

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	ND		5.0	2.6	mg/L			03/10/25 22:48	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/10/25 22:48	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/10/25 22:48	1

Lab Sample ID: LCS 240-647699/105
Matrix: Water
Analysis Batch: 647699

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	280	276		mg/L		99	86 - 123

Lab Sample ID: 240-219836-1 DU
Matrix: Water
Analysis Batch: 647699

Client Sample ID: 2022-05-F-20250227-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity	260		260		mg/L		0.7	20
Bicarbonate Alkalinity as CaCO3	260		255		mg/L		2	20
Carbonate Alkalinity as CaCO3	ND		5.83		mg/L		NC	20

Method: 2540 C-2020 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 240-647166/1
Matrix: Water
Analysis Batch: 647166

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	ND		10	7.8	mg/L			03/06/25 14:42	1

Lab Sample ID: LCS 240-647166/2
Matrix: Water
Analysis Batch: 647166

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	569	549		mg/L		96	80 - 120

Lab Sample ID: MB 240-647188/1
Matrix: Water
Analysis Batch: 647188

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	ND		10	7.8	mg/L			03/06/25 16:22	1

Lab Sample ID: LCS 240-647188/2
Matrix: Water
Analysis Batch: 647188

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	569	531		mg/L		93	80 - 120

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-647140/4
Matrix: Water
Analysis Batch: 647140

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.13	mg/L			03/07/25 16:47	1
Fluoride	ND		0.050	0.024	mg/L			03/07/25 16:47	1
Sulfate	ND		1.0	0.35	mg/L			03/07/25 16:47	1

Lab Sample ID: LCS 240-647140/5
Matrix: Water
Analysis Batch: 647140

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	49.7		mg/L		99	90 - 110
Fluoride	2.50	2.58		mg/L		103	90 - 110
Sulfate	50.0	51.0		mg/L		102	90 - 110

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-706551/1-A
Matrix: Water
Analysis Batch: 710467

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 706551

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.05952	U	0.141	0.141	1.00	0.263	pCi/L	03/07/25 07:39	04/02/25 20:59	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.9*		*30 - 110*	*03/07/25 07:39*	*04/02/25 20:59*	*1*

Lab Sample ID: LCS 160-706551/2-A
Matrix: Water
Analysis Batch: 710467

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 706551

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226	9.58	9.811		1.26	1.00	0.242	pCi/L	102	75 - 125

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*93.2*		*30 - 110*

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-706552/1-A
Matrix: Water
Analysis Batch: 710456

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 706552

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.1674	U	0.304	0.304	1.00	0.525	pCi/L	03/07/25 07:42	04/02/25 12:03	1

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

Lab Sample ID: MB 160-706552/1-A
Matrix: Water
Analysis Batch: 710456

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 706552

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	90.9		30 - 110	03/07/25 07:42	04/02/25 12:03	1
Y Carrier	83.0		30 - 110	03/07/25 07:42	04/02/25 12:03	1

Lab Sample ID: LCS 160-706552/2-A
Matrix: Water
Analysis Batch: 710456

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 706552

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228			7.97	8.027		1.15	1.00	0.508	pCi/L	101	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	93.2		30 - 110
Y Carrier	82.6		30 - 110

Metals

Prep Batch: 647098

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219836-1	2022-05-F-20250227-01	Total/NA	Water	7470A	
240-219836-2	DUP-001-F-20250227-01	Total/NA	Water	7470A	
240-219836-3	2022-04-F-20250228-01	Total/NA	Water	7470A	
MB 240-647098/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-647098/2-A	Lab Control Sample	Total/NA	Water	7470A	

Prep Batch: 647100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219836-1	2022-05-F-20250227-01	Total Recoverable	Water	3005A	
240-219836-2	DUP-001-F-20250227-01	Total Recoverable	Water	3005A	
240-219836-3	2022-04-F-20250228-01	Total Recoverable	Water	3005A	
MB 240-647100/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-647100/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-647100/3-A	Lab Control Sample	Total Recoverable	Water	3005A	
240-219836-1 MS	2022-05-F-20250227-01	Total Recoverable	Water	3005A	
240-219836-1 MSD	2022-05-F-20250227-01	Total Recoverable	Water	3005A	
240-219836-2 MS	DUP-001-F-20250227-01	Total Recoverable	Water	3005A	
240-219836-2 MSD	DUP-001-F-20250227-01	Total Recoverable	Water	3005A	

Analysis Batch: 647317

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219836-1	2022-05-F-20250227-01	Total Recoverable	Water	6020B	647100
240-219836-1	2022-05-F-20250227-01	Total Recoverable	Water	6020B	647100
240-219836-2	DUP-001-F-20250227-01	Total Recoverable	Water	6020B	647100
240-219836-2	DUP-001-F-20250227-01	Total Recoverable	Water	6020B	647100
240-219836-3	2022-04-F-20250228-01	Total Recoverable	Water	6020B	647100
MB 240-647100/1-A	Method Blank	Total Recoverable	Water	6020B	647100
LCS 240-647100/3-A	Lab Control Sample	Total Recoverable	Water	6020B	647100
240-219836-2 MS	DUP-001-F-20250227-01	Total Recoverable	Water	6020B	647100
240-219836-2 MS	DUP-001-F-20250227-01	Total Recoverable	Water	6020B	647100
240-219836-2 MSD	DUP-001-F-20250227-01	Total Recoverable	Water	6020B	647100
240-219836-2 MSD	DUP-001-F-20250227-01	Total Recoverable	Water	6020B	647100

Analysis Batch: 647339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219836-1	2022-05-F-20250227-01	Total/NA	Water	7470A	647098
240-219836-2	DUP-001-F-20250227-01	Total/NA	Water	7470A	647098
240-219836-3	2022-04-F-20250228-01	Total/NA	Water	7470A	647098
MB 240-647098/1-A	Method Blank	Total/NA	Water	7470A	647098
LCS 240-647098/2-A	Lab Control Sample	Total/NA	Water	7470A	647098

Analysis Batch: 647386

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219836-1	2022-05-F-20250227-01	Total Recoverable	Water	6010D	647100
240-219836-2	DUP-001-F-20250227-01	Total Recoverable	Water	6010D	647100
240-219836-3	2022-04-F-20250228-01	Total Recoverable	Water	6010D	647100
MB 240-647100/1-A	Method Blank	Total Recoverable	Water	6010D	647100
LCS 240-647100/2-A	Lab Control Sample	Total Recoverable	Water	6010D	647100
240-219836-1 MS	2022-05-F-20250227-01	Total Recoverable	Water	6010D	647100
240-219836-1 MSD	2022-05-F-20250227-01	Total Recoverable	Water	6010D	647100

General Chemistry

Analysis Batch: 647140

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219836-1	2022-05-F-20250227-01	Total/NA	Water	300.0	
240-219836-1	2022-05-F-20250227-01	Total/NA	Water	300.0	
240-219836-2	DUP-001-F-20250227-01	Total/NA	Water	300.0	
240-219836-2	DUP-001-F-20250227-01	Total/NA	Water	300.0	
240-219836-3	2022-04-F-20250228-01	Total/NA	Water	300.0	
MB 240-647140/4	Method Blank	Total/NA	Water	300.0	
LCS 240-647140/5	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 647166

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219836-1	2022-05-F-20250227-01	Total/NA	Water	2540 C-2020	
240-219836-2	DUP-001-F-20250227-01	Total/NA	Water	2540 C-2020	
MB 240-647166/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-647166/2	Lab Control Sample	Total/NA	Water	2540 C-2020	

Analysis Batch: 647188

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219836-3	2022-04-F-20250228-01	Total/NA	Water	2540 C-2020	
MB 240-647188/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-647188/2	Lab Control Sample	Total/NA	Water	2540 C-2020	

Analysis Batch: 647699

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219836-1	2022-05-F-20250227-01	Total/NA	Water	2320 B-2021	
240-219836-2	DUP-001-F-20250227-01	Total/NA	Water	2320 B-2021	
240-219836-3	2022-04-F-20250228-01	Total/NA	Water	2320 B-2021	
MB 240-647699/106	Method Blank	Total/NA	Water	2320 B-2021	
MB 240-647699/86	Method Blank	Total/NA	Water	2320 B-2021	
LCS 240-647699/105	Lab Control Sample	Total/NA	Water	2320 B-2021	
240-219836-1 DU	2022-05-F-20250227-01	Total/NA	Water	2320 B-2021	

Rad

Prep Batch: 706551

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219836-1	2022-05-F-20250227-01	Total/NA	Water	PrecSep-21	
240-219836-2	DUP-001-F-20250227-01	Total/NA	Water	PrecSep-21	
240-219836-3	2022-04-F-20250228-01	Total/NA	Water	PrecSep-21	
MB 160-706551/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-706551/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 706552

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219836-1	2022-05-F-20250227-01	Total/NA	Water	PrecSep_0	
240-219836-2	DUP-001-F-20250227-01	Total/NA	Water	PrecSep_0	
240-219836-3	2022-04-F-20250228-01	Total/NA	Water	PrecSep_0	
MB 160-706552/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-706552/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-219836-1
Project/Site: Gavin CCR

Client Sample ID: 2022-05-F-20250227-01
Lab Sample ID: 240-219836-1

Date Collected: 02/27/25 14:07
Matrix: Water
Date Received: 03/05/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			647100	MN7X	EET CLE	03/06/25 14:00
Total Recoverable	Analysis	6010D		1	647386	RKT	EET CLE	03/07/25 14:56
Total Recoverable	Prep	3005A			647100	MN7X	EET CLE	03/06/25 14:00
Total Recoverable	Analysis	6020B		1	647317	S4FJ	EET CLE	03/07/25 14:37
Total Recoverable	Prep	3005A			647100	MN7X	EET CLE	03/06/25 14:00
Total Recoverable	Analysis	6020B		10	647317	S4FJ	EET CLE	03/07/25 20:34
Total/NA	Prep	7470A			647098	MN7X	EET CLE	03/06/25 14:00
Total/NA	Analysis	7470A		1	647339	TQ6W	EET CLE	03/07/25 13:49
Total/NA	Analysis	2320 B-2021		1	647699	PQD2	EET CLE	03/11/25 00:51
Total/NA	Analysis	2540 C-2020		1	647166	TAV2	EET CLE	03/06/25 14:42
Total/NA	Analysis	300.0		5	647140	JMR	EET CLE	03/07/25 18:12
Total/NA	Analysis	300.0		50	647140	JMR	EET CLE	03/07/25 18:33
Total/NA	Prep	PrecSep-21			706551	OGC	EET SL	03/07/25 07:39
Total/NA	Analysis	9315		1	710467	TJR	EET SL	04/02/25 20:59
Total/NA	Prep	PrecSep_0			706552	OGC	EET SL	03/07/25 07:42
Total/NA	Analysis	9320		1	710456	SWS	EET SL	04/02/25 12:03
Total/NA	Analysis	Ra226_Ra228		1	710909	SCB	EET SL	04/04/25 15:10

Client Sample ID: DUP-001-F-20250227-01
Lab Sample ID: 240-219836-2

Date Collected: 02/27/25 00:00
Matrix: Water
Date Received: 03/05/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			647100	MN7X	EET CLE	03/06/25 14:00
Total Recoverable	Analysis	6010D		1	647386	RKT	EET CLE	03/07/25 15:17
Total Recoverable	Prep	3005A			647100	MN7X	EET CLE	03/06/25 14:00
Total Recoverable	Analysis	6020B		1	647317	S4FJ	EET CLE	03/07/25 14:40
Total Recoverable	Prep	3005A			647100	MN7X	EET CLE	03/06/25 14:00
Total Recoverable	Analysis	6020B		10	647317	S4FJ	EET CLE	03/07/25 20:42
Total/NA	Prep	7470A			647098	MN7X	EET CLE	03/06/25 14:00
Total/NA	Analysis	7470A		1	647339	TQ6W	EET CLE	03/07/25 13:51
Total/NA	Analysis	2320 B-2021		1	647699	PQD2	EET CLE	03/11/25 01:02
Total/NA	Analysis	2540 C-2020		1	647166	TAV2	EET CLE	03/06/25 14:42
Total/NA	Analysis	300.0		5	647140	JMR	EET CLE	03/07/25 18:54
Total/NA	Analysis	300.0		50	647140	JMR	EET CLE	03/07/25 19:15
Total/NA	Prep	PrecSep-21			706551	OGC	EET SL	03/07/25 07:39
Total/NA	Analysis	9315		1	710467	TJR	EET SL	04/02/25 20:59
Total/NA	Prep	PrecSep_0			706552	OGC	EET SL	03/07/25 07:42
Total/NA	Analysis	9320		1	710523	TJR	EET SL	04/02/25 14:00
Total/NA	Analysis	Ra226_Ra228		1	710909	SCB	EET SL	04/04/25 15:10

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-219836-1
Project/Site: Gavin CCR

Client Sample ID: 2022-04-F-20250228-01
Lab Sample ID: 240-219836-3

Date Collected: 02/28/25 13:52
Matrix: Water
Date Received: 03/05/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			647100	MN7X	EET CLE	03/06/25 14:00
Total Recoverable	Analysis	6010D		1	647386	RKT	EET CLE	03/07/25 15:30
Total Recoverable	Prep	3005A			647100	MN7X	EET CLE	03/06/25 14:00
Total Recoverable	Analysis	6020B		1	647317	S4FJ	EET CLE	03/07/25 14:54
Total/NA	Prep	7470A			647098	MN7X	EET CLE	03/06/25 14:00
Total/NA	Analysis	7470A		1	647339	TQ6W	EET CLE	03/07/25 13:52
Total/NA	Analysis	2320 B-2021		1	647699	PQD2	EET CLE	03/11/25 00:42
Total/NA	Analysis	2540 C-2020		1	647188	TAV2	EET CLE	03/06/25 16:22
Total/NA	Analysis	300.0		1	647140	JMR	EET CLE	03/07/25 19:36
Total/NA	Prep	PrecSep-21			706551	OGC	EET SL	03/07/25 07:39
Total/NA	Analysis	9315		1	710466	SWS	EET SL	04/02/25 21:11
Total/NA	Prep	PrecSep_0			706552	OGC	EET SL	03/07/25 07:42
Total/NA	Analysis	9320		1	710523	TJR	EET SL	04/02/25 14:00
Total/NA	Analysis	Ra226_Ra228		1	710909	SCB	EET SL	04/04/25 15:10

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

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

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-219836-1
Project/Site: Gavin CCR

Laboratory: Eurofins Cleveland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0806	12-31-26
Georgia	State	4062	02-27-26
Illinois	NELAP	200004	08-31-25
Iowa	State	421	06-01-25
Kansas	NELAP	E-10336	01-31-26
Kentucky (UST)	State	112225	02-28-26
Kentucky (WW)	State	KY98016	12-31-25
Minnesota	NELAP	039-999-348	12-31-25
New Hampshire	NELAP	225024	09-30-25
New Jersey	NELAP	OH001	07-03-25
New York	NELAP	10975	03-31-25
Ohio	State	8303	11-04-25
Ohio VAP	State	ORELAP 4062	02-28-26
Oregon	NELAP	4062	02-27-26
Pennsylvania	NELAP	68-00340	03-18-25
Texas	NELAP	T104704517-22-19	08-31-25
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	09-14-25
West Virginia DEP	State	210	12-31-25
Wisconsin	State	399167560	08-31-25

Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-25
ANAB	Dept. of Defense ELAP	L2305	04-06-25
ANAB	Dept. of Energy	L2305.01	04-06-25
ANAB	ISO/IEC 17025	L2305	04-08-25
Arizona	State	AZ0813	12-08-25
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-25
Connecticut	State	PH-0241	03-31-25 *
Florida	NELAP	E87689	06-30-25
HI - RadChem Recognition	State	n/a	06-30-25
Illinois	NELAP	200023	11-30-25
Iowa	State	373	12-01-26
Kansas	NELAP	E-10236	10-31-25
Kentucky (DW)	State	KY90125	12-31-25
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-25
Louisiana (All)	NELAP	106151	06-30-25
Louisiana (DW)	State	LA011	12-31-25
Maryland	State	310	09-30-25
Massachusetts	State	M-MO054	06-30-25
MI - RadChem Recognition	State	9005	06-30-25
Missouri	State	780	06-30-25
Nevada	State	MO00054	07-31-25
New Jersey	NELAP	MO002	06-30-25
New Mexico	State	MO00054	06-30-25

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-219836-1
Project/Site: Gavin CCR

Laboratory: Eurofins St. Louis (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
North Carolina (DW)	State	29700	07-31-25
North Dakota	State	R-207	06-30-25
Oklahoma	NELAP	9997	08-31-25
Oregon	NELAP	4157	09-01-25
Pennsylvania	NELAP	68-00540	02-28-26
South Carolina	State	85002	06-30-25
Texas	NELAP	T104704193	07-31-25
US Fish & Wildlife	US Federal Programs	058448	07-31-25
USDA	US Federal Programs	525-23-138-94730	05-18-26
Utah	NELAP	MO00054	07-31-25
Virginia	NELAP	460230	06-14-25
Washington	State	C592	08-30-25
West Virginia DEP	State	381	10-31-25

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

1.8 | 1.8

Chain of Custody Record

Columbus 209

eurofins Environment Testi...

Client Information	Sampler: Bobby Caste	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s):	COC No. 240-111832-39818.1
Client Contact: Taylor Huffman	Phone: 740-323-4308	E-Mail: roxanne.cisneros@et.eurofinsus.com	State of Origin:	Page: Page 1 of 8
Company: Lightstone Generation Gavin Power LLC	PWSID			Job #:
Address: 7397 OH-7	Due Date Requested:			
City: Cheshire	TAT Requested (days):			
State, Zip: OH, 45620	Compliance Project: Δ Yes Δ No			
Phone: 740-925-3171(Tel)	PO #: 2935505			
Email: taylor.huffman@lightstonegen.com	WO #:			
Project Name: Gavin CCR	Project #: 24019633			
Site: Gavin	SSOW#:			

Analysis Requested

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

240-219836 COC

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wastestl, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B, 6020, 7470A	2540C_Calcd - TDS	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	300.0_28D - Chloride, Fluoride & Sulfate	2320B - (MOD) Alkalinity	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	N	D	N	N		
2022-05-F-20250227-01	2-27-25	1407	G	Water	N		1	1	2	1	1		GW, MGS Out St. Louis
DUP-001-F-20250227-01	2-27-25	—	G	Water	N		1	1	2	1	1		
2022-04-F-20250228-01	2-28-25	1352	G	Water	N		1	1	2	1	1		
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									

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	[signature]	3-4-25/0930	ETA	Ashley Deal	3.4.25 12:50pm	ETA
2	Ashley Deal	3.4.25 1700	ETA	[signature]	3/5/25 0800	EC
3						

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins – Cleveland Sample Receipt Form/Narrative **Login # :** _____
Barberton Facility

Client Lightstone Generation Site Name _____ Cooler unpacked by: JB

Cooler Received on 3/5/25 Opened on 3/5/25

FedEx: 1st Grd Exp UPS FAS (Waypoint) Client Drop Off Eurofins Courier Other

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

Eurofins Cooler # 1EC 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 # _____ (CF_____°C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	(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)?	(Yes)	No
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# HC448976
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 # _____

Eurofins - Cleveland Sample Receipt Multiple Cooler Form				
Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
(EC) Client Box Other	IR GUN #: ~~13~~	1.8	1.8	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #: ~~13~~	1.8	1.8	(Wet Ice) Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice Blue Ice Dry Ice Water None
☐ See Temperature Excursion Form				

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

3/5/2025

Login Container Summary Report

240-219836

4/4/2025

Temperature readings _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
2022-05 F-20250227-01	240-219836-A-1	Plastic 250ml - unpreserved				
2022-05-F-20250227-01	240-219836-B 1	Plastic 250ml - unpreserved				
2022-05-F-20250227-01	240-219836-C-1	Plastic 500ml - unpreserved				
2022-05-F-20250227-01	240-219836-D-1	Plastic 500ml - with Nitric Acid	<2			
2022-05-F-20250227-01	240-219836-E-1	Plastic 1 liter - Nitric Acid	<2			
2022-05-F-20250227-01	240-219836-F-1	Plastic 1 liter - Nitric Acid	<2			
DUP-001-F-20250227-01	240-219836-A-2	Plastic 250ml - unpreserved				
DUP-001-F-20250227-01	240-219836-B-2	Plastic 250ml - unpreserved				
DUP-001-F-20250227-01	240-219836-C-2	Plastic 500ml - unpreserved				
DUP-001-F-20250227-01	240-219836-D-2	Plastic 500ml - with Nitric Acid	<2			
DUP-001-F-20250227-01	240-219836-E-2	Plastic 1 liter - Nitric Acid	<2			
DUP-001-F-20250227-01	240-219836-F-2	Plastic 1 liter - Nitric Acid	<2			
2022-04-F-20250228-01	240-219836-A-3	Plastic 60 mL - unpreserved				
2022-04-F-20250228-01	240-219836-B-3	Plastic 60 mL - unpreserved				
2022-04-F-20250228-01	240-219836-C-3	Plastic 500ml - unpreserved				
2022-04-F-20250228-01	240-219836-D-3	Plastic 500ml - with Nitric Acid	<2			
2022-04-F-20250228-01	240-219836-E-3	Plastic 1 liter - Nitric Acid	<2			
2022-04-F-20250228-01	240-219836-F-3	Plastic 1 liter - Nitric Acid	<2			

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s): N/A	COC No: 240-199321.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: roxanne.cisneros@et.eurofinsus.com	State of Origin: Ohio	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): N/A		Job #: 240-219836-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 3/18/2025			
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Federal GWM Wells	Project #: 24019633			
Site: N/A	SSOW#: N/A			

Analysis Requested

Preservation Codes: -

Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9320_Ra228/PrecSep_0 Radium-228 (GFPC)	9315_Ra226/PrecSep_21 Radium-226 (GFPC)	Ra226Ra228_GFPC/ Combined Radium-226 and Radium-228	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
2022-05-F-20250227-01 (240-219836-1)	2/27/25	14:07 Eastern	G	Water			X	X	X	2	
DUP-001-F-20250227-01 (240-219836-2)	2/27/25	Eastern	G	Water			X	X	X	2	
2022-04-F-20250228-01 (240-219836-3)	2/28/25	13:52 Eastern	G	Water			X	X	X	2	

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

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

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

Relinquished by:	Date/Time: 3/5/25 945	Company Eurof	Received by:	Date/Time: 0945 MAR 0 6 2025	Company
Relinquished by:	Date/Time:	Company	Received by: Cheyenne Forrest	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 10/10/2024

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s): N/A	COC No: 240-199321.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: roxanne.cisneros@et.eurofinsus.com	State of Origin: Ohio	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): N/A		Job #: 240-219836-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 3/18/2025			
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Federal GWM Wells	Project #: 24019633			
Site: N/A	SSOW#: N/A			

Analysis Requested

Preservation Codes: -

Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9320_Ra228/PrecSep_0 Radium-228 (GFPC)	9315_Ra226/PrecSep_21 Radium-226 (GFPC)	Ra226Ra228_GFPC/ Combined Radium-226 and Radium-228	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
2022-05-F-20250227-01 (240-219836-1)	2/27/25	14:07 Eastern	G	Water			X	X	X	2	
DUP-001-F-20250227-01 (240-219836-2)	2/27/25	Eastern	G	Water			X	X	X	2	
2022-04-F-20250228-01 (240-219836-3)	2/28/25	13:52 Eastern	G	Water			X	X	X	2	

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

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

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

Relinquished by:	Date/Time: 3/5/25 945	Company Eurc	Received by:	Date/Time: 0945 MAR 0 6 2025	Company
Relinquished by:	Date/Time:	Company	Received by: Cheyenne Forrest	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: 10/10/2024

4/4/2025

Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-219836-1

Login Number: 219836
List Number: 2
Creator: Forrest, Cheyenne L

List Source: Eurofins St. Louis
List Creation: 03/06/25 12:52 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?	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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620
Generated 4/4/2025 4:19:40 PM

JOB DESCRIPTION

Gavin CCR

JOB NUMBER

240-219850-1

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

myEOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization

Roxanne Cisneros

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4/4/2025 4:19:40 PM

Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(330)497-9396

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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.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

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

Job ID: 240-219850-1 — Eurofins Cleveland

Job Narrative
240-219850-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 3/5/2025 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.8°C and 1.8°C.

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

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

Gas Flow Proportional Counter
Method 9320_Ra228: Radium 228 Batch 706552

A beta Daily Check source was inadvertently not run the day the associated samples counted. However, the Daily Check source run the day before and the day after the sample counted was within acceptable QC limits demonstrating detector performance and stability.2022-12-F-20250303-01 (240-219850-4)

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

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

Method Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Gavin CCR

Job ID: 240-219850-1

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CLE
6020B	Metals (ICP/MS)	SW846	EET CLE
7470A	Mercury (CVAA)	SW846	EET CLE
2320 B-2021	Alkalinity	SM	EET CLE
2540 C-2020	Solids, Total Dissolved (TDS)	SM	EET CLE
300.0	Anions, Ion Chromatography	EPA	EET CLE
9315	Radium 226 by GFPC	SW846	EET SL
9320	Radium-228 (GFPC)	SW846	EET SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	EET SL
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CLE
7470A	Preparation, Mercury	SW846	EET CLE
PrecSep_0	Preparation, Precipitate Separation	None	EET SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	EET SL

Protocol References:

EPA = US Environmental Protection Agency

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:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

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

Sample Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Gavin CCR

Job ID: 240-219850-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-219850-1	2022-14-F-20250228-01	Water	02/28/25 12:02	03/05/25 08:00
240-219850-4	2022-12-F-20250303-01	Water	03/03/25 10:43	03/05/25 08:00
240-219850-5	2022-13-F-20250303-01	Water	03/03/25 11:32	03/05/25 08:00

Detection Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Gavin CCR

Job ID: 240-219850-1

Client Sample ID: 2022-14-F-20250228-01 — Lab Sample ID: 240-219850-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	400		100	57	ug/L	1		6010D	Total Recoverable
Antimony	1.0	J	2.0	0.57	ug/L	1		6020B	Total Recoverable
Arsenic	1.4	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	2200		5.0	0.77	ug/L	1		6020B	Total Recoverable
Cadmium	0.38	J	1.0	0.077	ug/L	1		6020B	Total Recoverable
Calcium	290000		1000	250	ug/L	1		6020B	Total Recoverable
Chromium	3.3	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	1.9		1.0	0.086	ug/L	1		6020B	Total Recoverable
Lead	0.70	J	1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	150		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	87000	B	1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	19		5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	9300		1000	220	ug/L	1		6020B	Total Recoverable
Selenium	0.97	J	5.0	0.89	ug/L	1		6020B	Total Recoverable
Sodium	6000000		10000	8800	ug/L	10		6020B	Total Recoverable
Thallium	0.67	J	1.0	0.51	ug/L	1		6020B	Total Recoverable
Total Alkalinity	170		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	170		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	13000		1000	780	mg/L	1		2540 C-2020	Total/NA
Chloride	11000	F1	100	13	mg/L	100		300.0	Total/NA
Fluoride	0.45	J	0.50	0.24	mg/L	10		300.0	Total/NA
Sulfate	46		10	3.5	mg/L	10		300.0	Total/NA

Client Sample ID: 2022-12-F-20250303-01 — Lab Sample ID: 240-219850-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	76	J	100	57	ug/L	1		6010D	Total Recoverable
Barium	14		5.0	0.77	ug/L	1		6020B	Total Recoverable
Calcium	77000		1000	250	ug/L	1		6020B	Total Recoverable
Chromium	1.2	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	0.25	J	1.0	0.086	ug/L	1		6020B	Total Recoverable
Lithium	18		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	23000	B	1000	61	ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: 2022-12-F-20250303-01 (Continued)
Lab Sample ID: 240-219850-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	3100		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	110000		1000	880	ug/L	1		6020B	Total Recoverable
Total Alkalinity	280		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	280		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	590		10	7.8	mg/L	1		2540 C-2020	Total/NA
Chloride	14		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.13		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	210		5.0	1.7	mg/L	5		300.0	Total/NA

Client Sample ID: 2022-13-F-20250303-01
Lab Sample ID: 240-219850-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	350		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	1.1	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	1100		5.0	0.77	ug/L	1		6020B	Total Recoverable
Calcium	55000		1000	250	ug/L	1		6020B	Total Recoverable
Cobalt	0.30	J	1.0	0.086	ug/L	1		6020B	Total Recoverable
Lithium	58		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	16000	B	1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	27		5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	5100		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	2400000		1000	880	ug/L	1		6020B	Total Recoverable
Total Alkalinity	180		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	180		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	6200		100	78	mg/L	1		2540 C-2020	Total/NA
Chloride	3000		50	6.4	mg/L	50		300.0	Total/NA
Fluoride	1.1		0.25	0.12	mg/L	5		300.0	Total/NA
Sulfate	5.1		5.0	1.7	mg/L	5		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 2022-14-F-20250228-01
Date Collected: 02/28/25 12:02
Date Received: 03/05/25 08:00

Lab Sample ID: 240-219850-1
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	400		100	57	ug/L		03/06/25 14:00	03/07/25 16:55	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.0	J	2.0	0.57	ug/L		03/06/25 14:00	03/07/25 15:58	1
Arsenic	1.4	J	5.0	0.75	ug/L		03/06/25 14:00	03/07/25 15:58	1
Barium	2200		5.0	0.77	ug/L		03/06/25 14:00	03/07/25 15:58	1
Beryllium	ND		1.0	0.27	ug/L		03/06/25 14:00	03/07/25 15:58	1
Cadmium	0.38	J	1.0	0.077	ug/L		03/06/25 14:00	03/07/25 15:58	1
Calcium	290000		1000	250	ug/L		03/06/25 14:00	03/07/25 15:58	1
Chromium	3.3	J	5.0	1.2	ug/L		03/06/25 14:00	03/07/25 15:58	1
Cobalt	1.9		1.0	0.086	ug/L		03/06/25 14:00	03/07/25 15:58	1
Lead	0.70	J	1.0	0.45	ug/L		03/06/25 14:00	03/07/25 15:58	1
Lithium	150		8.0	3.4	ug/L		03/06/25 14:00	03/07/25 15:58	1
Magnesium	87000	B	1000	61	ug/L		03/06/25 14:00	03/07/25 15:58	1
Molybdenum	19		5.0	1.1	ug/L		03/06/25 14:00	03/07/25 15:58	1
Potassium	9300		1000	220	ug/L		03/06/25 14:00	03/07/25 15:58	1
Selenium	0.97	J	5.0	0.89	ug/L		03/06/25 14:00	03/07/25 15:58	1
Sodium	6000000		10000	8800	ug/L		03/06/25 14:00	03/10/25 15:38	10
Thallium	0.67	J	1.0	0.51	ug/L		03/06/25 14:00	03/07/25 15:58	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		03/06/25 14:00	03/07/25 12:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	170		5.0	2.6	mg/L			03/10/25 23:36	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	170		5.0	2.6	mg/L			03/10/25 23:36	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			03/10/25 23:36	1
Total Dissolved Solids (SM 2540 C-2020)	13000		1000	780	mg/L			03/06/25 16:22	1
Chloride (EPA 300.0)	11000	F1	100	13	mg/L			03/07/25 22:04	100
Fluoride (EPA 300.0)	0.45	J	0.50	0.24	mg/L			03/07/25 21:01	10
Sulfate (EPA 300.0)	46		10	3.5	mg/L			03/07/25 21:01	10

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.29		0.346	0.365	1.00	0.306	pCi/L	03/07/25 07:39	04/02/25 21:11	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*103*		*30 - 110*	*03/07/25 07:39*	*04/02/25 21:11*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.955		0.422	0.431	1.00	0.550	pCi/L	03/07/25 07:42	04/02/25 14:02	1

Client: Lightstone Generation Gavin Power LLC
Project/Site: Gavin CCR

Job ID: 240-219850-1

Client Sample ID: 2022-14-F-20250228-01
Date Collected: 02/28/25 12:02
Date Received: 03/05/25 08:00

Lab Sample ID: 240-219850-1
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*103*		*30 - 110*	*03/07/25 07:42*	*04/02/25 14:02*	*1*
Y Carrier	*83.4*		*30 - 110*	*03/07/25 07:42*	*04/02/25 14:02*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**2.24**		0.546	0.565	5.00	0.550	pCi/L		04/04/25 15:10	1

Client Sample ID: 2022-12-F-20250303-01
Date Collected: 03/03/25 10:43
Date Received: 03/05/25 08:00

Lab Sample ID: 240-219850-4
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**76**	**J**	100	57	ug/L		03/06/25 14:00	03/07/25 18:54	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		03/06/25 14:00	03/07/25 17:11	1
Arsenic	ND		5.0	0.75	ug/L		03/06/25 14:00	03/07/25 17:11	1
Barium	**14**		5.0	0.77	ug/L		03/06/25 14:00	03/07/25 17:11	1
Beryllium	ND		1.0	0.27	ug/L		03/06/25 14:00	03/07/25 17:11	1
Cadmium	ND		1.0	0.077	ug/L		03/06/25 14:00	03/07/25 17:11	1
Calcium	**77000**		1000	250	ug/L		03/06/25 14:00	03/07/25 17:11	1
Chromium	**1.2**	**J**	5.0	1.2	ug/L		03/06/25 14:00	03/07/25 17:11	1
Cobalt	**0.25**	**J**	1.0	0.086	ug/L		03/06/25 14:00	03/07/25 17:11	1
Lead	ND		1.0	0.45	ug/L		03/06/25 14:00	03/07/25 17:11	1
Lithium	**18**		8.0	3.4	ug/L		03/06/25 14:00	03/07/25 17:11	1
Magnesium	**23000**	**B**	1000	61	ug/L		03/06/25 14:00	03/07/25 17:11	1
Molybdenum	ND		5.0	1.1	ug/L		03/06/25 14:00	03/07/25 17:11	1
Potassium	**3100**		1000	220	ug/L		03/06/25 14:00	03/07/25 17:11	1
Selenium	ND		5.0	0.89	ug/L		03/06/25 14:00	03/07/25 17:11	1
Sodium	**110000**		1000	880	ug/L		03/06/25 14:00	03/10/25 16:44	1
Thallium	ND		1.0	0.51	ug/L		03/06/25 14:00	03/07/25 17:11	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		03/06/25 14:00	03/07/25 13:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	**280**		5.0	2.6	mg/L			03/11/25 00:21	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**280**		5.0	2.6	mg/L			03/11/25 00:21	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			03/11/25 00:21	1
Total Dissolved Solids (SM 2540 C-2020)	**590**		10	7.8	mg/L			03/07/25 10:35	1
Chloride (EPA 300.0)	**14**		1.0	0.13	mg/L			03/07/25 23:08	1
Fluoride (EPA 300.0)	**0.13**		0.050	0.024	mg/L			03/07/25 23:08	1
Sulfate (EPA 300.0)	**210**		5.0	1.7	mg/L			03/07/25 23:29	5

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0506	U	0.132	0.132	1.00	0.309	pCi/L	03/07/25 07:39	04/02/25 21:11	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.7*		*30 - 110*	*03/07/25 07:39*	*04/02/25 21:11*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.138	U	0.492	0.492	1.00	0.879	pCi/L	03/07/25 07:42	04/02/25 13:43	1

Client Sample ID: 2022-12-F-20250303-01
Date Collected: 03/03/25 10:43
Date Received: 03/05/25 08:00

Lab Sample ID: 240-219850-4
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.7*		*30 - 110*	*03/07/25 07:42*	*04/02/25 13:43*	*1*
Y Carrier	*79.6*		*30 - 110*	*03/07/25 07:42*	*04/02/25 13:43*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0874	U	0.509	0.509	5.00	0.879	pCi/L		04/04/25 15:10	1

Client Sample ID: 2022-13-F-20250303-01
Date Collected: 03/03/25 11:32
Date Received: 03/05/25 08:00

Lab Sample ID: 240-219850-5
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**350**		100	57	ug/L		03/06/25 14:00	03/07/25 18:41	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		03/06/25 14:00	03/07/25 17:08	1
Arsenic	**1.1**	**J**	5.0	0.75	ug/L		03/06/25 14:00	03/07/25 17:08	1
Barium	**1100**		5.0	0.77	ug/L		03/06/25 14:00	03/07/25 17:08	1
Beryllium	ND		1.0	0.27	ug/L		03/06/25 14:00	03/07/25 17:08	1
Cadmium	ND		1.0	0.077	ug/L		03/06/25 14:00	03/07/25 17:08	1
Calcium	**55000**		1000	250	ug/L		03/06/25 14:00	03/07/25 17:08	1
Chromium	ND		5.0	1.2	ug/L		03/06/25 14:00	03/07/25 17:08	1
Cobalt	**0.30**	**J**	1.0	0.086	ug/L		03/06/25 14:00	03/07/25 17:08	1
Lead	ND		1.0	0.45	ug/L		03/06/25 14:00	03/07/25 17:08	1
Lithium	**58**		8.0	3.4	ug/L		03/06/25 14:00	03/07/25 17:08	1
Magnesium	**16000**	**B**	1000	61	ug/L		03/06/25 14:00	03/07/25 17:08	1
Molybdenum	**27**		5.0	1.1	ug/L		03/06/25 14:00	03/07/25 17:08	1
Potassium	**5100**		1000	220	ug/L		03/06/25 14:00	03/07/25 17:08	1
Selenium	ND		5.0	0.89	ug/L		03/06/25 14:00	03/07/25 17:08	1
Sodium	**2400000**		1000	880	ug/L		03/06/25 14:00	03/10/25 16:41	1
Thallium	ND		1.0	0.51	ug/L		03/06/25 14:00	03/07/25 17:08	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		03/06/25 14:00	03/07/25 13:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	**180**		5.0	2.6	mg/L			03/11/25 00:27	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**180**		5.0	2.6	mg/L			03/11/25 00:27	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			03/11/25 00:27	1
Total Dissolved Solids (SM 2540 C-2020)	**6200**		100	78	mg/L			03/07/25 10:35	1
Chloride (EPA 300.0)	**3000**		50	6.4	mg/L			03/08/25 00:11	50
Fluoride (EPA 300.0)	**1.1**		0.25	0.12	mg/L			03/07/25 23:50	5
Sulfate (EPA 300.0)	**5.1**		5.0	1.7	mg/L			03/07/25 23:50	5

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**1.00**		0.304	0.317	1.00	0.236	pCi/L	03/07/25 07:39	04/02/25 21:11	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.2*		*30 - 110*	*03/07/25 07:39*	*04/02/25 21:11*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**1.56**		0.649	0.664	1.00	0.892	pCi/L	03/07/25 07:42	04/02/25 14:01	1

Client Sample ID: 2022-13-F-20250303-01
Date Collected: 03/03/25 11:32
Date Received: 03/05/25 08:00

Lab Sample ID: 240-219850-5
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.2*		*30 - 110*	*03/07/25 07:42*	*04/02/25 14:01*	*1*
Y Carrier	*86.0*		*30 - 110*	*03/07/25 07:42*	*04/02/25 14:01*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**2.56**		0.717	0.736	5.00	0.892	pCi/L		04/04/25 15:10	1

Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Gavin CCR

Job ID: 240-219850-1

Method: 9315 - Radium 226 by GFPC

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)
		Ba
Lab Sample ID	Client Sample ID	(30-110)
240-219850-1	2022-14-F-20250228-01	103
240-219850-1 MS	2022-14-F-20250228-MS-01	95.3
240-219850-1 MSD	2022-14-F-20250228-MSD-01	97.9
240-219850-4	2022-12-F-20250303-01	85.7
240-219850-5	2022-13-F-20250303-01	93.2
LCS 160-706551/2-A	Lab Control Sample	93.2
MB 160-706551/1-A	Method Blank	90.9

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	(30-110)	(30-110)
240-219850-1	2022-14-F-20250228-01	103	83.4
240-219850-1 MS	2022-14-F-20250228-MS-01	95.3	83.4
240-219850-1 MSD	2022-14-F-20250228-MSD-01	97.9	82.6
240-219850-4	2022-12-F-20250303-01	85.7	79.6
240-219850-5	2022-13-F-20250303-01	93.2	86.0
LCS 160-706552/2-A	Lab Control Sample	93.2	82.6
MB 160-706552/1-A	Method Blank	90.9	83.0

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-647099/1-A
Matrix: Water
Analysis Batch: 647386

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 647099

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		03/06/25 14:00	03/07/25 16:26	1

Lab Sample ID: LCS 240-647099/2-A
Matrix: Water
Analysis Batch: 647386

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 647099

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Boron			1000	1020		ug/L		102	80 - 120		

Lab Sample ID: 240-219850-1 MS
Matrix: Water
Analysis Batch: 647386

Client Sample ID: 2022-14-F-20250228-MS-01
Prep Type: Total Recoverable
Prep Batch: 647099

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Boron	400		1000	1460		ug/L		106	75 - 125		

Lab Sample ID: 240-219850-1 MSD
Matrix: Water
Analysis Batch: 647386

Client Sample ID: 2022-14-F-20250228-MSD-01
Prep Type: Total Recoverable
Prep Batch: 647099

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	400		1000	1450		ug/L		105	75 - 125	0	20

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-647099/1-A
Matrix: Water
Analysis Batch: 647317

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 647099

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		03/06/25 14:00	03/07/25 15:38	1
Arsenic	ND		5.0	0.75	ug/L		03/06/25 14:00	03/07/25 15:38	1
Barium	ND		5.0	0.77	ug/L		03/06/25 14:00	03/07/25 15:38	1
Beryllium	ND		1.0	0.27	ug/L		03/06/25 14:00	03/07/25 15:38	1
Cadmium	ND		1.0	0.077	ug/L		03/06/25 14:00	03/07/25 15:38	1
Calcium	ND		1000	250	ug/L		03/06/25 14:00	03/07/25 15:38	1
Chromium	ND		5.0	1.2	ug/L		03/06/25 14:00	03/07/25 15:38	1
Cobalt	ND		1.0	0.086	ug/L		03/06/25 14:00	03/07/25 15:38	1
Lead	ND		1.0	0.45	ug/L		03/06/25 14:00	03/07/25 15:38	1
Lithium	ND		8.0	3.4	ug/L		03/06/25 14:00	03/07/25 15:38	1
Magnesium	115	J	1000	61	ug/L		03/06/25 14:00	03/07/25 15:38	1
Molybdenum	ND		5.0	1.1	ug/L		03/06/25 14:00	03/07/25 15:38	1
Potassium	ND		1000	220	ug/L		03/06/25 14:00	03/07/25 15:38	1
Selenium	ND		5.0	0.89	ug/L		03/06/25 14:00	03/07/25 15:38	1
Thallium	ND		1.0	0.51	ug/L		03/06/25 14:00	03/07/25 15:38	1

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

Lab Sample ID: MB 240-647099/1-A
Matrix: Water
Analysis Batch: 647651

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 647099

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	ND		1000	880	ug/L		03/06/25 14:00	03/10/25 15:33	1

Lab Sample ID: LCS 240-647099/3-A
Matrix: Water
Analysis Batch: 647317

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 647099

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	98.6		ug/L		99	80 - 120
Arsenic	1000	1000		ug/L		100	80 - 120
Barium	1000	963		ug/L		96	80 - 120
Beryllium	500	480		ug/L		96	80 - 120
Cadmium	500	469		ug/L		94	80 - 120
Calcium	25000	24900		ug/L		99	80 - 120
Chromium	500	493		ug/L		99	80 - 120
Cobalt	500	489		ug/L		98	80 - 120
Lead	500	516		ug/L		103	80 - 120
Lithium	500	476		ug/L		95	80 - 120
Magnesium	25000	25100		ug/L		101	80 - 120
Molybdenum	500	493		ug/L		99	80 - 120
Potassium	25000	25900		ug/L		104	80 - 120
Selenium	1000	973		ug/L		97	80 - 120
Thallium	1000	1070		ug/L		107	80 - 120

Lab Sample ID: LCS 240-647099/3-A
Matrix: Water
Analysis Batch: 647651

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 647099

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sodium	25000	25300		ug/L		101	80 - 120

Lab Sample ID: 240-219850-1 MS
Matrix: Water
Analysis Batch: 647317

Client Sample ID: 2022-14-F-20250228-MS-01
Prep Type: Total Recoverable
Prep Batch: 647099

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	1.0	J	100	103		ug/L		102	80 - 120
Arsenic	1.4	J	1000	1120		ug/L		112	80 - 120
Barium	2200		1000	3290		ug/L		109	80 - 120
Beryllium	ND		500	506		ug/L		101	80 - 120
Cadmium	0.38	J	500	457		ug/L		91	80 - 120
Calcium	290000		25000	313000	4	ug/L		106	80 - 120
Chromium	3.3	J	500	488		ug/L		97	80 - 120
Cobalt	1.9		500	541		ug/L		108	80 - 120
Lead	0.70	J	500	542		ug/L		108	80 - 120
Lithium	150		500	664		ug/L		103	80 - 120
Magnesium	87000	B	25000	113000		ug/L		104	80 - 120
Molybdenum	19		500	575		ug/L		111	80 - 120
Potassium	9300		25000	36000		ug/L		107	80 - 120
Selenium	0.97	J	1000	973		ug/L		97	80 - 120

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

Lab Sample ID: 240-219850-1 MS
Matrix: Water
Analysis Batch: 647317

Client Sample ID: 2022-14-F-20250228-MS-01
Prep Type: Total Recoverable
Prep Batch: 647099

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Thallium	0.67	J	1000	1140		ug/L		114	80 - 120

Lab Sample ID: 240-219850-1 MS
Matrix: Water
Analysis Batch: 647651

Client Sample ID: 2022-14-F-20250228-MS-01
Prep Type: Total Recoverable
Prep Batch: 647099

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sodium	6000000		25000	6010000	4	ug/L		169	80 - 120

Lab Sample ID: 240-219850-1 MSD
Matrix: Water
Analysis Batch: 647317

Client Sample ID: 2022-14-F-20250228-MSD-01
Prep Type: Total Recoverable
Prep Batch: 647099

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	1.0	J	100	103		ug/L		102	80 - 120	0	20
Arsenic	1.4	J	1000	1160		ug/L		116	80 - 120	3	20
Barium	2200		1000	3360		ug/L		117	80 - 120	2	20
Beryllium	ND		500	515		ug/L		103	80 - 120	2	20
Cadmium	0.38	J	500	464		ug/L		93	80 - 120	2	20
Calcium	290000		25000	321000	4	ug/L		135	80 - 120	2	20
Chromium	3.3	J	500	492		ug/L		98	80 - 120	1	20
Cobalt	1.9		500	553		ug/L		110	80 - 120	2	20
Lead	0.70	J	500	551		ug/L		110	80 - 120	2	20
Lithium	150		500	678		ug/L		106	80 - 120	2	20
Magnesium	87000	B	25000	114000		ug/L		110	80 - 120	1	20
Molybdenum	19		500	587		ug/L		114	80 - 120	2	20
Potassium	9300		25000	36400		ug/L		108	80 - 120	1	20
Selenium	0.97	J	1000	1010		ug/L		101	80 - 120	4	20
Thallium	0.67	J	1000	1160		ug/L		116	80 - 120	2	20

Lab Sample ID: 240-219850-1 MSD
Matrix: Water
Analysis Batch: 647651

Client Sample ID: 2022-14-F-20250228-MSD-01
Prep Type: Total Recoverable
Prep Batch: 647099

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sodium	6000000		25000	6100000	4	ug/L		511	80 - 120	1	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-647105/1-A
Matrix: Water
Analysis Batch: 647339

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 647105

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		03/06/25 14:00	03/07/25 12:17	1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 240-647105/2-A
Matrix: Water
Analysis Batch: 647339

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 647105

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			5.00	5.17		ug/L		103	80 - 120		

Lab Sample ID: 240-219850-1 MS
Matrix: Water
Analysis Batch: 647339

Client Sample ID: 2022-14-F-20250228-MS-01
Prep Type: Total/NA
Prep Batch: 647105

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	ND		1.00	0.991		ug/L		99	80 - 120		

Lab Sample ID: 240-219850-1 MSD
Matrix: Water
Analysis Batch: 647339

Client Sample ID: 2022-14-F-20250228-MSD-01
Prep Type: Total/NA
Prep Batch: 647105

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		1.00	0.984		ug/L		98	80 - 120	1	20

Method: 2320 B-2021 - Alkalinity

Lab Sample ID: MB 240-647699/66
Matrix: Water
Analysis Batch: 647699

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	ND		5.0	2.6	mg/L			03/10/25 21:07	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/10/25 21:07	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/10/25 21:07	1

Lab Sample ID: MB 240-647699/86
Matrix: Water
Analysis Batch: 647699

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	ND		5.0	2.6	mg/L			03/10/25 22:48	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/10/25 22:48	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/10/25 22:48	1

Lab Sample ID: LCS 240-647699/85
Matrix: Water
Analysis Batch: 647699

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Alkalinity			280	266		mg/L		95	86 - 123		

Lab Sample ID: 240-219850-1 DU
Matrix: Water
Analysis Batch: 647699

Client Sample ID: 2022-14-F-20250228-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Alkalinity	170			171		mg/L				0.07	20
Bicarbonate Alkalinity as CaCO3	170			171		mg/L				0.07	20

Method: 2320 B-2021 - Alkalinity (Continued)

Lab Sample ID: 240-219850-1 DU
Matrix: Water
Analysis Batch: 647699

Client Sample ID: 2022-14-F-20250228-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

Method: 2540 C-2020 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 240-647188/1
Matrix: Water
Analysis Batch: 647188

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	ND		10	7.8	mg/L			03/06/25 16:22	1

Lab Sample ID: LCS 240-647188/2
Matrix: Water
Analysis Batch: 647188

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	569	531		mg/L		93	80 - 120

Lab Sample ID: 240-219850-1 DU
Matrix: Water
Analysis Batch: 647188

Client Sample ID: 2022-14-F-20250228-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	13000		14400		mg/L		11	20

Lab Sample ID: MB 240-647274/1
Matrix: Water
Analysis Batch: 647274

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	ND		10	7.8	mg/L			03/07/25 10:35	1

Lab Sample ID: LCS 240-647274/2
Matrix: Water
Analysis Batch: 647274

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	569	528		mg/L		93	80 - 120

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-647140/4
Matrix: Water
Analysis Batch: 647140

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.13	mg/L			03/07/25 16:47	1
Fluoride	ND		0.050	0.024	mg/L			03/07/25 16:47	1
Sulfate	ND		1.0	0.35	mg/L			03/07/25 16:47	1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 240-647140/5
Matrix: Water
Analysis Batch: 647140

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			50.0	49.7		mg/L		99	90 - 110		
Fluoride			2.50	2.58		mg/L		103	90 - 110		
Sulfate			50.0	51.0		mg/L		102	90 - 110		

Lab Sample ID: 240-219850-1 MS
Matrix: Water
Analysis Batch: 647140

Client Sample ID: 2022-14-F-20250228-MS-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Fluoride	0.45	J	25.0	25.7		mg/L		101	80 - 120		
Sulfate	46		500	545		mg/L		100	80 - 120		

Lab Sample ID: 240-219850-1 MS
Matrix: Water
Analysis Batch: 647140

Client Sample ID: 2022-14-F-20250228-MS-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	11000	F1	5000	14500	F1	mg/L		74	80 - 120		

Lab Sample ID: 240-219850-1 MSD
Matrix: Water
Analysis Batch: 647140

Client Sample ID: 2022-14-F-20250228-MSD-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluoride	0.45	J	25.0	25.7		mg/L		101	80 - 120	0	15
Sulfate	46		500	546		mg/L		100	80 - 120	0	15

Lab Sample ID: 240-219850-1 MSD
Matrix: Water
Analysis Batch: 647140

Client Sample ID: 2022-14-F-20250228-MSD-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	11000	F1	5000	14900		mg/L		81	80 - 120	2	15

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-706551/1-A
Matrix: Water
Analysis Batch: 710467

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 706551

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.05952	U	0.141	0.141	1.00	0.263	pCi/L	03/07/25 07:39	04/02/25 20:59	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.9*		*30 - 110*	*03/07/25 07:39*	*04/02/25 20:59*	*1*

Method: 9315 - Radium 226 by GFPC (Continued)

Lab Sample ID: LCS 160-706551/2-A
Matrix: Water
Analysis Batch: 710467

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 706551

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-226			9.58	9.811		1.26	1.00	0.242	pCi/L	102	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*93.2*		*30 - 110*

Lab Sample ID: 240-219850-1 MS
Matrix: Water
Analysis Batch: 710466

Client Sample ID: 2022-14-F-20250228-MS-01
Prep Type: Total/NA
Prep Batch: 706551

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-226	1.29		9.51	9.599		1.24	1.00	0.350	pCi/L	87	60 - 140		

Carrier	*MS %Yield*	*MS Qualifier*	*Limits*
Ba Carrier	*95.3*		*30 - 110*

Lab Sample ID: 240-219850-1 MSD
Matrix: Water
Analysis Batch: 710466

Client Sample ID: 2022-14-F-20250228-MSD-01
Prep Type: Total/NA
Prep Batch: 706551

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	1.29		9.56	9.796		1.25	1.00	0.274	pCi/L	89	60 - 140	0.08	1

Carrier	*MSD %Yield*	*MSD Qualifier*	*Limits*
Ba Carrier	*97.9*		*30 - 110*

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-706552/1-A
Matrix: Water
Analysis Batch: 710456

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 706552

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.1674	U	0.304	0.304	1.00	0.525	pCi/L	03/07/25 07:42	04/02/25 12:03	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.9*		*30 - 110*	*03/07/25 07:42*	*04/02/25 12:03*	*1*
Y Carrier	*83.0*		*30 - 110*	*03/07/25 07:42*	*04/02/25 12:03*	*1*

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

Lab Sample ID: LCS 160-706552/2-A
Matrix: Water
Analysis Batch: 710456

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 706552

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228			7.97	8.027		1.15	1.00	0.508	pCi/L	101	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*93.2*		*30 - 110*
Y Carrier	*82.6*		*30 - 110*

Lab Sample ID: 240-219850-1 MS
Matrix: Water
Analysis Batch: 710466

Client Sample ID: 2022-14-F-20250228-MS-01
Prep Type: Total/NA
Prep Batch: 706552

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228	0.955		7.91	9.965		1.43	1.00	0.618	pCi/L	114	60 - 140		

Carrier	*MS %Yield*	*MS Qualifier*	*Limits*
Ba Carrier	*95.3*		*30 - 110*
Y Carrier	*83.4*		*30 - 110*

Lab Sample ID: 240-219850-1 MSD
Matrix: Water
Analysis Batch: 710466

Client Sample ID: 2022-14-F-20250228-MSD-01
Prep Type: Total/NA
Prep Batch: 706552

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	0.955		7.96	11.09		1.55	1.00	0.804	pCi/L	127	60 - 140	0.38	1

Carrier	*MSD %Yield*	*MSD Qualifier*	*Limits*
Ba Carrier	*97.9*		*30 - 110*
Y Carrier	*82.6*		*30 - 110*

Metals

Prep Batch: 647099

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219850-1	2022-14-F-20250228-01	Total Recoverable	Water	3005A	
240-219850-4	2022-12-F-20250303-01	Total Recoverable	Water	3005A	
240-219850-5	2022-13-F-20250303-01	Total Recoverable	Water	3005A	
MB 240-647099/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-647099/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-647099/3-A	Lab Control Sample	Total Recoverable	Water	3005A	
240-219850-1 MS	2022-14-F-20250228-MS-01	Total Recoverable	Water	3005A	
240-219850-1 MS	2022-14-F-20250228-MS-01	Total Recoverable	Water	3005A	
240-219850-1 MSD	2022-14-F-20250228-MSD-01	Total Recoverable	Water	3005A	
240-219850-1 MSD	2022-14-F-20250228-MSD-01	Total Recoverable	Water	3005A	

Prep Batch: 647105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219850-1	2022-14-F-20250228-01	Total/NA	Water	7470A	
240-219850-4	2022-12-F-20250303-01	Total/NA	Water	7470A	
240-219850-5	2022-13-F-20250303-01	Total/NA	Water	7470A	
MB 240-647105/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-647105/2-A	Lab Control Sample	Total/NA	Water	7470A	
240-219850-1 MS	2022-14-F-20250228-MS-01	Total/NA	Water	7470A	
240-219850-1 MSD	2022-14-F-20250228-MSD-01	Total/NA	Water	7470A	

Analysis Batch: 647317

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219850-1	2022-14-F-20250228-01	Total Recoverable	Water	6020B	647099
240-219850-4	2022-12-F-20250303-01	Total Recoverable	Water	6020B	647099
240-219850-5	2022-13-F-20250303-01	Total Recoverable	Water	6020B	647099
MB 240-647099/1-A	Method Blank	Total Recoverable	Water	6020B	647099
LCS 240-647099/3-A	Lab Control Sample	Total Recoverable	Water	6020B	647099
240-219850-1 MS	2022-14-F-20250228-MS-01	Total Recoverable	Water	6020B	647099
240-219850-1 MSD	2022-14-F-20250228-MSD-01	Total Recoverable	Water	6020B	647099

Analysis Batch: 647339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219850-1	2022-14-F-20250228-01	Total/NA	Water	7470A	647105
240-219850-4	2022-12-F-20250303-01	Total/NA	Water	7470A	647105
240-219850-5	2022-13-F-20250303-01	Total/NA	Water	7470A	647105
MB 240-647105/1-A	Method Blank	Total/NA	Water	7470A	647105
LCS 240-647105/2-A	Lab Control Sample	Total/NA	Water	7470A	647105
240-219850-1 MS	2022-14-F-20250228-MS-01	Total/NA	Water	7470A	647105
240-219850-1 MSD	2022-14-F-20250228-MSD-01	Total/NA	Water	7470A	647105

Analysis Batch: 647386

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219850-1	2022-14-F-20250228-01	Total Recoverable	Water	6010D	647099
240-219850-4	2022-12-F-20250303-01	Total Recoverable	Water	6010D	647099
240-219850-5	2022-13-F-20250303-01	Total Recoverable	Water	6010D	647099
MB 240-647099/1-A	Method Blank	Total Recoverable	Water	6010D	647099
LCS 240-647099/2-A	Lab Control Sample	Total Recoverable	Water	6010D	647099
240-219850-1 MS	2022-14-F-20250228-MS-01	Total Recoverable	Water	6010D	647099
240-219850-1 MSD	2022-14-F-20250228-MSD-01	Total Recoverable	Water	6010D	647099

Metals

Analysis Batch: 647651

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219850-1	2022-14-F-20250228-01	Total Recoverable	Water	6020B	647099
240-219850-4	2022-12-F-20250303-01	Total Recoverable	Water	6020B	647099
240-219850-5	2022-13-F-20250303-01	Total Recoverable	Water	6020B	647099
MB 240-647099/1-A	Method Blank	Total Recoverable	Water	6020B	647099
LCS 240-647099/3-A	Lab Control Sample	Total Recoverable	Water	6020B	647099
240-219850-1 MS	2022-14-F-20250228-MS-01	Total Recoverable	Water	6020B	647099
240-219850-1 MSD	2022-14-F-20250228-MSD-01	Total Recoverable	Water	6020B	647099

General Chemistry

Analysis Batch: 647140

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219850-1	2022-14-F-20250228-01	Total/NA	Water	300.0	
240-219850-1	2022-14-F-20250228-01	Total/NA	Water	300.0	
240-219850-4	2022-12-F-20250303-01	Total/NA	Water	300.0	
240-219850-4	2022-12-F-20250303-01	Total/NA	Water	300.0	
240-219850-5	2022-13-F-20250303-01	Total/NA	Water	300.0	
240-219850-5	2022-13-F-20250303-01	Total/NA	Water	300.0	
MB 240-647140/4	Method Blank	Total/NA	Water	300.0	
LCS 240-647140/5	Lab Control Sample	Total/NA	Water	300.0	
240-219850-1 MS	2022-14-F-20250228-MS-01	Total/NA	Water	300.0	
240-219850-1 MS	2022-14-F-20250228-MS-01	Total/NA	Water	300.0	
240-219850-1 MSD	2022-14-F-20250228-MSD-01	Total/NA	Water	300.0	
240-219850-1 MSD	2022-14-F-20250228-MSD-01	Total/NA	Water	300.0	

Analysis Batch: 647188

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219850-1	2022-14-F-20250228-01	Total/NA	Water	2540 C-2020	
MB 240-647188/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-647188/2	Lab Control Sample	Total/NA	Water	2540 C-2020	
240-219850-1 DU	2022-14-F-20250228-01	Total/NA	Water	2540 C-2020	

Analysis Batch: 647274

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219850-4	2022-12-F-20250303-01	Total/NA	Water	2540 C-2020	
240-219850-5	2022-13-F-20250303-01	Total/NA	Water	2540 C-2020	
MB 240-647274/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-647274/2	Lab Control Sample	Total/NA	Water	2540 C-2020	

Analysis Batch: 647699

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219850-1	2022-14-F-20250228-01	Total/NA	Water	2320 B-2021	
240-219850-4	2022-12-F-20250303-01	Total/NA	Water	2320 B-2021	
240-219850-5	2022-13-F-20250303-01	Total/NA	Water	2320 B-2021	
MB 240-647699/66	Method Blank	Total/NA	Water	2320 B-2021	
MB 240-647699/86	Method Blank	Total/NA	Water	2320 B-2021	
LCS 240-647699/85	Lab Control Sample	Total/NA	Water	2320 B-2021	
240-219850-1 DU	2022-14-F-20250228-01	Total/NA	Water	2320 B-2021	

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-219850-1
Project/Site: Gavin CCR

Rad

Prep Batch: 706551

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219850-1	2022-14-F-20250228-01	Total/NA	Water	PrecSep-21	
240-219850-4	2022-12-F-20250303-01	Total/NA	Water	PrecSep-21	
240-219850-5	2022-13-F-20250303-01	Total/NA	Water	PrecSep-21	
MB 160-706551/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-706551/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
240-219850-1 MS	2022-14-F-20250228-MS-01	Total/NA	Water	PrecSep-21	
240-219850-1 MSD	2022-14-F-20250228-MSD-01	Total/NA	Water	PrecSep-21	

Prep Batch: 706552

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-219850-1	2022-14-F-20250228-01	Total/NA	Water	PrecSep_0	
240-219850-4	2022-12-F-20250303-01	Total/NA	Water	PrecSep_0	
240-219850-5	2022-13-F-20250303-01	Total/NA	Water	PrecSep_0	
MB 160-706552/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-706552/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
240-219850-1 MS	2022-14-F-20250228-MS-01	Total/NA	Water	PrecSep_0	
240-219850-1 MSD	2022-14-F-20250228-MSD-01	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-219850-1
Project/Site: Gavin CCR

Client Sample ID: 2022-14-F-20250228-01
Lab Sample ID: 240-219850-1

Date Collected: 02/28/25 12:02
Matrix: Water
Date Received: 03/05/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			647099	BN	EET CLE	03/06/25 14:00
Total Recoverable	Analysis	6010D		1	647386	RKT	EET CLE	03/07/25 16:55
Total Recoverable	Prep	3005A			647099	BN	EET CLE	03/06/25 14:00
Total Recoverable	Analysis	6020B		10	647651	S4FJ	EET CLE	03/10/25 15:38
Total Recoverable	Prep	3005A			647099	BN	EET CLE	03/06/25 14:00
Total Recoverable	Analysis	6020B		1	647317	S4FJ	EET CLE	03/07/25 15:58
Total/NA	Prep	7470A			647105	BN	EET CLE	03/06/25 14:00
Total/NA	Analysis	7470A		1	647339	TQ6W	EET CLE	03/07/25 12:25
Total/NA	Analysis	2320 B-2021		1	647699	PQD2	EET CLE	03/10/25 23:36
Total/NA	Analysis	2540 C-2020		1	647188	TAV2	EET CLE	03/06/25 16:22
Total/NA	Analysis	300.0		10	647140	JMR	EET CLE	03/07/25 21:01
Total/NA	Analysis	300.0		100	647140	JMR	EET CLE	03/07/25 22:04
Total/NA	Prep	PrecSep-21			706551	OGC	EET SL	03/07/25 07:39
Total/NA	Analysis	9315		1	710466	SWS	EET SL	04/02/25 21:11
Total/NA	Prep	PrecSep_0			706552	OGC	EET SL	03/07/25 07:42
Total/NA	Analysis	9320		1	710467	TJR	EET SL	04/02/25 14:02
Total/NA	Analysis	Ra226_Ra228		1	710909	SCB	EET SL	04/04/25 15:10

Client Sample ID: 2022-12-F-20250303-01
Lab Sample ID: 240-219850-4

Date Collected: 03/03/25 10:43
Matrix: Water
Date Received: 03/05/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			647099	BN	EET CLE	03/06/25 14:00
Total Recoverable	Analysis	6010D		1	647386	RKT	EET CLE	03/07/25 18:54
Total Recoverable	Prep	3005A			647099	BN	EET CLE	03/06/25 14:00
Total Recoverable	Analysis	6020B		1	647651	S4FJ	EET CLE	03/10/25 16:44
Total Recoverable	Prep	3005A			647099	BN	EET CLE	03/06/25 14:00
Total Recoverable	Analysis	6020B		1	647317	S4FJ	EET CLE	03/07/25 17:11
Total/NA	Prep	7470A			647105	BN	EET CLE	03/06/25 14:00
Total/NA	Analysis	7470A		1	647339	TQ6W	EET CLE	03/07/25 13:11
Total/NA	Analysis	2320 B-2021		1	647699	PQD2	EET CLE	03/11/25 00:21
Total/NA	Analysis	2540 C-2020		1	647274	TAV2	EET CLE	03/07/25 10:35
Total/NA	Analysis	300.0		1	647140	JMR	EET CLE	03/07/25 23:08
Total/NA	Analysis	300.0		5	647140	JMR	EET CLE	03/07/25 23:29
Total/NA	Prep	PrecSep-21			706551	OGC	EET SL	03/07/25 07:39
Total/NA	Analysis	9315		1	710466	SWS	EET SL	04/02/25 21:11
Total/NA	Prep	PrecSep_0			706552	OGC	EET SL	03/07/25 07:42
Total/NA	Analysis	9320		1	710523	TJR	EET SL	04/02/25 13:43
Total/NA	Analysis	Ra226_Ra228		1	710909	SCB	EET SL	04/04/25 15:10

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Project/Site: Gavin CCR

Job ID: 240-219850-1

Client Sample ID: 2022-13-F-20250303-01

Date Collected: 03/03/25 11:32
Date Received: 03/05/25 08:00

Lab Sample ID: 240-219850-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			647099	BN	EET CLE	03/06/25 14:00
Total Recoverable	Analysis	6010D		1	647386	RKT	EET CLE	03/07/25 18:41
Total Recoverable	Prep	3005A			647099	BN	EET CLE	03/06/25 14:00
Total Recoverable	Analysis	6020B		1	647651	S4FJ	EET CLE	03/10/25 16:41
Total Recoverable	Prep	3005A			647099	BN	EET CLE	03/06/25 14:00
Total Recoverable	Analysis	6020B		1	647317	S4FJ	EET CLE	03/07/25 17:08
Total/NA	Prep	7470A			647105	BN	EET CLE	03/06/25 14:00
Total/NA	Analysis	7470A		1	647339	TQ6W	EET CLE	03/07/25 13:09
Total/NA	Analysis	2320 B-2021		1	647699	PQD2	EET CLE	03/11/25 00:27
Total/NA	Analysis	2540 C-2020		1	647274	TAV2	EET CLE	03/07/25 10:35
Total/NA	Analysis	300.0		5	647140	JMR	EET CLE	03/07/25 23:50
Total/NA	Analysis	300.0		50	647140	JMR	EET CLE	03/08/25 00:11
Total/NA	Prep	PrecSep-21			706551	OGC	EET SL	03/07/25 07:39
Total/NA	Analysis	9315		1	710466	SWS	EET SL	04/02/25 21:11
Total/NA	Prep	PrecSep_0			706552	OGC	EET SL	03/07/25 07:42
Total/NA	Analysis	9320		1	710523	TJR	EET SL	04/02/25 14:01
Total/NA	Analysis	Ra226_Ra228		1	710909	SCB	EET SL	04/04/25 15:10

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

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

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-219850-1
Project/Site: Gavin CCR

Laboratory: Eurofins Cleveland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0806	12-31-26
Georgia	State	4062	02-27-26
Illinois	NELAP	200004	08-31-25
Iowa	State	421	06-01-25
Kansas	NELAP	E-10336	01-31-26
Kentucky (UST)	State	112225	02-28-26
Kentucky (WW)	State	KY98016	12-31-25
Minnesota	NELAP	039-999-348	12-31-25
New Hampshire	NELAP	225024	09-30-25
New Jersey	NELAP	OH001	07-03-25
New York	NELAP	10975	03-31-25
Ohio	State	8303	11-04-25
Ohio VAP	State	ORELAP 4062	02-28-26
Oregon	NELAP	4062	02-27-26
Pennsylvania	NELAP	68-00340	03-18-25
Texas	NELAP	T104704517-22-19	08-31-25
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	09-14-25
West Virginia DEP	State	210	12-31-25
Wisconsin	State	399167560	08-31-25

Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-25
ANAB	Dept. of Defense ELAP	L2305	04-06-25
ANAB	Dept. of Energy	L2305.01	04-06-25
ANAB	ISO/IEC 17025	L2305	04-08-25
Arizona	State	AZ0813	12-08-25
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-25
Connecticut	State	PH-0241	03-31-25 *
Florida	NELAP	E87689	06-30-25
HI - RadChem Recognition	State	n/a	06-30-25
Illinois	NELAP	200023	11-30-25
Iowa	State	373	12-01-26
Kansas	NELAP	E-10236	10-31-25
Kentucky (DW)	State	KY90125	12-31-25
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-25
Louisiana (All)	NELAP	106151	06-30-25
Louisiana (DW)	State	LA011	12-31-25
Maryland	State	310	09-30-25
Massachusetts	State	M-MO054	06-30-25
MI - RadChem Recognition	State	9005	06-30-25
Missouri	State	780	06-30-25
Nevada	State	MO00054	07-31-25
New Jersey	NELAP	MO002	06-30-25
New Mexico	State	MO00054	06-30-25

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-219850-1
Project/Site: Gavin CCR

Laboratory: Eurofins St. Louis (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
North Carolina (DW)	State	29700	07-31-25
North Dakota	State	R-207	06-30-25
Oklahoma	NELAP	9997	08-31-25
Oregon	NELAP	4157	09-01-25
Pennsylvania	NELAP	68-00540	02-28-26
South Carolina	State	85002	06-30-25
Texas	NELAP	T104704193	07-31-25
US Fish & Wildlife	US Federal Programs	058448	07-31-25
USDA	US Federal Programs	525-23-138-94730	05-18-26
Utah	NELAP	MO00054	07-31-25
Virginia	NELAP	460230	06-14-25
Washington	State	C592	08-30-25
West Virginia DEP	State	381	10-31-25

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

1.8 | 1.8

Chain of Custody Record

Columbus 209

eurofins Environment Testing

Client Information	Sampler: Bobby Casto	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s):	COC No. 240-111832-39818.1
Client Contact: Taylor Huffman	Phone: 740-373-4308	E-Mail: roxanne.cisneros@et.eurofinsus.com	State of Origin:	Page: Page 1 of 8
Company: Lightstone Generation Gavin Power LLC	PWSID			Job #:
Address: 7397 OH-7	Due Date Requested:			
City: Cheshire	TAT Requested (days):			
State, Zip: OH, 45620	Compliance Project: Δ Yes Δ No			
Phone: 740-925-3171(Tel)	PO #: 2935505			
Email: taylor.huffman@lightstonegen.com	WO #:			
Project Name: Gavin CCR	Project #: 24019633			
Site: Gavin	SSOW#:			

Analysis Requested

240-219850 COC

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

617, MGS Out St. Louis

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B, 6020, 7470A	2540C_Calcd - TDS	9315_Ra226, 9320_Ra226, Ra226Ra228_GFPC	300.0_28D - Chloride, Fluoride & Sulfate	2320B - (MOD) Alkalinity	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	N	D	N	N		
2022-14-F-20250228-01	2-28-25	1202	G	Water			1	1	2	1	1		
2022-14-F-20250228-MS-01	2-28-25	1202	G	Water		Y	1	1	2	1	1		
2022-14-F-20250228-MSD-01	2-28-25	1202	G	Water		Y	1	1	2	1	1		
2022-12-F-20250303-01	3-3-25	1043	G	Water			1	1	2	1	1		
2022-13-F-20250303-01	3-3-25	1132	G	Water			1	1	2	1	1		
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									

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	[signature]	3-4-25/0930	ET	Ashley Degl	3.4.25 1250PM	ETJ
2	Ashley Degl	3.4.25 1700	ET	[signature]	2/5/25 0800	EC
3						

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins – Cleveland Sample Receipt Form/Narrative Login # :
Barberton Facility

Client Lightstone Generation Site Name

Cooler Received on 3/5/25 Opened on 3/5/25

Cooler Unpacked by:

FedEx: 1st Grd Exp UPS FAS (Waypoint) Client Drop Off Eurofins Courier Other

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

Eurofins Cooler # 15C 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 # _____ (CF _____ °C) Observed Cooler Temp _____ °C Corrected Cooler Temp. _____ °C

2.	Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	(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)?	(Yes) No
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# HC448976
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 # : _____

Eurofins - Cleveland Sample Receipt Multiple Cooler Form

Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
EC Client Box Other	IR GUN #: 13	1.8	1.8	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: 13	1.8	1.8	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:	

3/5/2025

Login Container Summary Report

240-219850

4/4/2025

Temperature readings _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
2022-14-F-20250228-01	240-219850-A-1	Plastic 60 mL - unpreserved				
2022-14-F-20250228-MS-01	240-219850-A-1 MS	Plastic 60 mL - unpreserved				
2022-14-F-20250228-MSD-01	240-219850-A-1 MSD	Plastic 60 mL - unpreserved				
2022-14-F-20250228-01	240-219850-B-1	Plastic 60 mL - unpreserved				
2022-14-F-20250228-MS-01	240-219850-B-1 MS	Plastic 60 mL - unpreserved				
2022-14-F-20250228-MSD-01	240-219850-B-1 MSD	Plastic 60 mL - unpreserved				
2022-14-F-20250228-01	240-219850-C-1	Plastic 500ml - unpreserved				
2022-14-F-20250228-MS-01	240-219850-C-1 MS	Plastic 500ml - unpreserved				
2022-14-F-20250228-MSD-01	240-219850-C-1 MSD	Plastic 500ml - unpreserved				
2022-14-F-20250228-01	240-219850-D-1	Plastic 500ml - with Nitric Acid	<2			
2022-14-F-20250228-MS-01	240-219850-D-1 MS	Plastic 500ml - with Nitric Acid	<2			
2022-14-F-20250228-MSD-01	240-219850-D-1 MSD	Plastic 500ml - with Nitric Acid	<2			
2022-14-F-20250228-01	240-219850-E-1	Plastic 1 liter - Nitric Acid	<2			
2022-14-F-20250228-MS-01	240-219850-E-1 MS	Plastic 1 liter - Nitric Acid	<2			
2022-14-F-20250228-MSD-01	240-219850-E-1 MSD	Plastic 1 liter - Nitric Acid	<2			
2022-14-F-20250228-01	240-219850-F-1	Plastic 1 liter - Nitric Acid	<2			
2022-14-F-20250228-MS-01	240-219850-F-1 MS	Plastic 1 liter - Nitric Acid	<2			
2022-14-F-20250228-MSD-01	240-219850-F-1 MSD	Plastic 1 liter - Nitric Acid	<2			
2022-12-F-20250303-01	240-219850-A-4	Plastic 60 mL - unpreserved				
2022-12-F-20250303-01	240-219850-B-4	Plastic 60 mL - unpreserved				
2022-12-F-20250303-01	240-219850-C-4	Plastic 500ml - unpreserved				
2022-12-F-20250303-01	240-219850-D-4	Plastic 500ml - with Nitric Acid	<2			
2022-12-F-20250303-01	240-219850-E-4	Plastic 1 liter - Nitric Acid	<2			
2022-12-F-20250303-01	240-219850-F-4	Plastic 1 liter - Nitric Acid	<2			
2022-13-F-20250303-01	240-219850-A-5	Plastic 60 mL - unpreserved				
2022-13-F-20250303-01	240-219850-B-5	Plastic 60 mL - unpreserved				
2022-13-F-20250303-01	240-219850-C-5	Plastic 500ml - unpreserved				
2022-13-F-20250303-01	240-219850-D-5	Plastic 500ml - with Nitric Acid	<2			
2022-13-F-20250303-01	240-219850-E-5	Plastic 1 liter - Nitric Acid	<2			
2022-13-F-20250303-01	240-219850-F-5	Plastic 1 liter - Nitric Acid	<2			

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s): N/A	COC No: 240-199321.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: roxanne.cisneros@et.eurofinsus.com	State of Origin: Ohio	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): N/A		Job #: 240-219850-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 3/18/2025			
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Federal GWM Wells	Project #: 24019633			
Site: N/A	SSOW#: N/A			

Analysis Requested

Preservation Codes: -

Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9320_Ra228/PrecSep_0 Radium-228 (GFPC)	9315_Ra226/PrecSep_21 Radium-226 (GFPC)	Ra226Ra228_GFPC/ Combined Radium-226 and Radium-228	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
2022-14-F-20250228-01 (240-219850-1)	2/28/25	12:02 Eastern	G	Water			X	X	X	2	
2022-14-F-20250228-MS-01 (240-219850-1MS)	2/28/25	12:02 Eastern	G	Water			X	X	X	2	
2022-14-F-20250228-MSD-01 (240-219850-1MSD)	2/28/25	12:02 Eastern	G	Water			X	X	X	2	
2022-12-F-20250303-01 (240-219850-4)	3/3/25	10:43 Eastern	G	Water			X	X	X	2	
2022-13-F-20250303-01 (240-219850-5)	3/3/25	11:32 Eastern	G	Water			X	X	X	2	

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

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

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	3/5/25 945	Eurofins		0945 MAR 06 2025	
Relinquished by:	Date/Time:	Company	Received by: Cheyenne Forrest	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 10/10/2024

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s): N/A	COC No: 240-199321.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: roxanne.cisneros@et.eurofinsus.com	State of Origin: Ohio	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): N/A		Job #: 240-219850-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 3/18/2025			Preservation Codes: -
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Federal GWM Wells	Project #: 24019633			
Site: N/A	SSOW#: N/A			Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9320_Ra228/PrecSep_0 Radium-228 (GFPC)	9315_Ra226/PrecSep_21 Radium-226 (GFPC)	Ra226Ra228_GFPC/ Combined Radium-226 and Radium-228	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
2022-14-F-20250228-01 (240-219850-1)	2/28/25	12:02 Eastern	G	Water			X	X	X	2	
2022-14-F-20250228-MS-01 (240-219850-1MS)	2/28/25	12:02 Eastern	G	Water			X	X	X	2	
2022-14-F-20250228-MSD-01 (240-219850-1MSD)	2/28/25	12:02 Eastern	G	Water			X	X	X	2	
2022-12-F-20250303-01 (240-219850-4)	3/3/25	10:43 Eastern	G	Water			X	X	X	2	
2022-13-F-20250303-01 (240-219850-5)	3/3/25	11:32 Eastern	G	Water			X	X	X	2	

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

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

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	3/5/25 945	Eurofins		0945 MAR 06 2025	
Relinquished by:	Date/Time:	Company	Received by: Cheyenne Forrest	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: 10/10/2024

Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-219850-1

Login Number: 219850
List Number: 2
Creator: Forrest, Cheyenne L

List Source: Eurofins St. Louis
List Creation: 03/06/25 12:52 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?	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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620

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JOB DESCRIPTION

Federal CCR Wells Snap Sampler - App3

JOB NUMBER

240-220121-1

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization

Roxanne Cisneros

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3/17/2025 11:03:03 PM

Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(330)497-9396

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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-220121-1
Project/Site: Federal CCR Wells Snap Sampler - App3

Qualifiers

Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.

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: 240-220121-1 Eurofins Cleveland

Job Narrative
240-220121-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 3/8/2025 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 8 coolers at receipt time were 1.5°C, 2.5°C, 3.4°C, 3.4°C, 3.4°C, 3.5°C, 3.5°C and 4.7°C.

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

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

Method Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-220121-1
Project/Site: Federal CCR Wells Snap Sampler - App3

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CLE
6020B	Metals (ICP/MS)	SW846	EET CLE
2540 C-2020	Solids, Total Dissolved (TDS)	SM	EET CLE
300.0	Anions, Ion Chromatography	EPA	EET CLE
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CLE

Protocol References:

EPA = US Environmental Protection Agency

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

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

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Sample Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-220121-1
Project/Site: Federal CCR Wells Snap Sampler - App3

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-220121-1	2018-04-F-20250306-01	Water	03/06/25 10:25	03/08/25 08:00
240-220121-2	2018-03-F-20250306-01	Water	03/06/25 11:30	03/08/25 08:00
240-220121-3	2018-02-F-20250306-01	Water	03/06/25 12:45	03/08/25 08:00

Detection Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-220121-1
Project/Site: Federal CCR Wells Snap Sampler - App3

Client Sample ID: 2018-04-F-20250306-01 — Lab Sample ID: 240-220121-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	310		100	57	ug/L	1		6010D	Total Recoverable
Calcium	93000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	22000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	4800		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	360000		1000	880	ug/L	1		6020B	Total Recoverable
Total Dissolved Solids	1000		20	16	mg/L	1		2540 C-2020	Total/NA
Chloride	34		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.50		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	670		5.0	1.7	mg/L	5		300.0	Total/NA

Client Sample ID: 2018-03-F-20250306-01 — Lab Sample ID: 240-220121-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	530		100	57	ug/L	1		6010D	Total Recoverable
Calcium	25000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	7100		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	2900		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	1400000		5000	4400	ug/L	5		6020B	Total Recoverable
Total Dissolved Solids	3300		50	39	mg/L	1		2540 C-2020	Total/NA
Chloride	1000		20	2.6	mg/L	20		300.0	Total/NA
Fluoride	0.84		0.10	0.048	mg/L	2		300.0	Total/NA
Sulfate	940		20	7.0	mg/L	20		300.0	Total/NA

Client Sample ID: 2018-02-F-20250306-01 — Lab Sample ID: 240-220121-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	370		100	57	ug/L	1		6010D	Total Recoverable
Calcium	56000		1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	16000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	4900		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	2300000		5000	4400	ug/L	5		6020B	Total Recoverable
Total Dissolved Solids	5300		100	78	mg/L	1		2540 C-2020	Total/NA
Chloride	3100		25	3.2	mg/L	25		300.0	Total/NA
Fluoride	1.2		0.25	0.12	mg/L	5		300.0	Total/NA
Sulfate	140		5.0	1.7	mg/L	5		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-220121-1
Project/Site: Federal CCR Wells Snap Sampler - App3

Client Sample ID: 2018-04-F-20250306-01
Lab Sample ID: 240-220121-1
Date Collected: 03/06/25 10:25
Matrix: Water
Date Received: 03/08/25 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	310		100	57	ug/L		03/11/25 14:00	03/12/25 22:11	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	93000		1000	250	ug/L		03/11/25 14:00	03/13/25 15:40	1
Magnesium	22000		1000	61	ug/L		03/11/25 14:00	03/13/25 15:40	1
Potassium	4800		1000	220	ug/L		03/11/25 14:00	03/13/25 15:40	1
Sodium	360000		1000	880	ug/L		03/11/25 14:00	03/13/25 15:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540 C-2020)	1000		20	16	mg/L			03/12/25 13:15	1
Chloride (EPA 300.0)	34		1.0	0.13	mg/L			03/13/25 10:40	1
Fluoride (EPA 300.0)	0.50		0.050	0.024	mg/L			03/13/25 10:40	1
Sulfate (EPA 300.0)	670		5.0	1.7	mg/L			03/13/25 11:45	5

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-220121-1
Project/Site: Federal CCR Wells Snap Sampler - App3

Client Sample ID: 2018-03-F-20250306-01
Lab Sample ID: 240-220121-2
Date Collected: 03/06/25 11:30
Matrix: Water
Date Received: 03/08/25 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	530		100	57	ug/L		03/11/25 14:00	03/12/25 22:16	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	25000		1000	250	ug/L		03/11/25 14:00	03/13/25 15:42	1
Magnesium	7100		1000	61	ug/L		03/11/25 14:00	03/13/25 15:42	1
Potassium	2900		1000	220	ug/L		03/11/25 14:00	03/13/25 15:42	1
Sodium	1400000		5000	4400	ug/L		03/11/25 14:00	03/14/25 16:32	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540 C-2020)	3300		50	39	mg/L			03/12/25 13:15	1
Chloride (EPA 300.0)	1000		20	2.6	mg/L			03/13/25 12:29	20
Fluoride (EPA 300.0)	0.84		0.10	0.048	mg/L			03/13/25 12:07	2
Sulfate (EPA 300.0)	940		20	7.0	mg/L			03/13/25 12:29	20

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-220121-1
Project/Site: Federal CCR Wells Snap Sampler - App3

Client Sample ID: 2018-02-F-20250306-01
Lab Sample ID: 240-220121-3
Date Collected: 03/06/25 12:45
Matrix: Water
Date Received: 03/08/25 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	370		100	57	ug/L		03/11/25 14:00	03/12/25 22:20	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	56000		1000	250	ug/L		03/11/25 14:00	03/13/25 15:45	1
Magnesium	16000		1000	61	ug/L		03/11/25 14:00	03/13/25 15:45	1
Potassium	4900		1000	220	ug/L		03/11/25 14:00	03/13/25 15:45	1
Sodium	2300000		5000	4400	ug/L		03/11/25 14:00	03/14/25 16:35	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540 C-2020)	5300		100	78	mg/L			03/12/25 13:15	1
Chloride (EPA 300.0)	3100		25	3.2	mg/L			03/13/25 13:12	25
Fluoride (EPA 300.0)	1.2		0.25	0.12	mg/L			03/13/25 12:50	5
Sulfate (EPA 300.0)	140		5.0	1.7	mg/L			03/13/25 12:50	5

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-647673/1-A
Matrix: Water
Analysis Batch: 647985

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 647673

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND	^+	100	57	ug/L		03/11/25 14:00	03/12/25 20:20	1

Lab Sample ID: LCS 240-647673/2-A
Matrix: Water
Analysis Batch: 647985

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 647673

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1000	1140	^+	ug/L		114	80 - 120

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-647673/1-A
Matrix: Water
Analysis Batch: 648025

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 647673

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1000	250	ug/L		03/11/25 14:00	03/12/25 15:21	1
Magnesium	ND		1000	61	ug/L		03/11/25 14:00	03/12/25 15:21	1
Potassium	ND		1000	220	ug/L		03/11/25 14:00	03/12/25 15:21	1
Sodium	ND		1000	880	ug/L		03/11/25 14:00	03/12/25 15:21	1

Lab Sample ID: LCS 240-647673/3-A
Matrix: Water
Analysis Batch: 648025

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 647673

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	25000	24700		ug/L		99	80 - 120
Magnesium	25000	22800		ug/L		91	80 - 120
Potassium	25000	25100		ug/L		100	80 - 120
Sodium	25000	24200		ug/L		97	80 - 120

Method: 2540 C-2020 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 240-647966/1
Matrix: Water
Analysis Batch: 647966

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	ND		10	7.8	mg/L			03/12/25 13:15	1

Lab Sample ID: LCS 240-647966/2
Matrix: Water
Analysis Batch: 647966

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	569	506		mg/L		89	80 - 120

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-220121-1
Project/Site: Federal CCR Wells Snap Sampler - App3

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-647823/3
Matrix: Water
Analysis Batch: 647823

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.13	mg/L			03/13/25 07:24	1
Fluoride	ND		0.050	0.024	mg/L			03/13/25 07:24	1
Sulfate	ND		1.0	0.35	mg/L			03/13/25 07:24	1

Lab Sample ID: LCS 240-647823/4
Matrix: Water
Analysis Batch: 647823

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	46.3		mg/L		93	90 - 110
Fluoride	2.50	2.53		mg/L		101	90 - 110
Sulfate	50.0	47.9		mg/L		96	90 - 110

Metals

Prep Batch: 647673

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220121-1	2018-04-F-20250306-01	Total Recoverable	Water	3005A	
240-220121-2	2018-03-F-20250306-01	Total Recoverable	Water	3005A	
240-220121-3	2018-02-F-20250306-01	Total Recoverable	Water	3005A	
MB 240-647673/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-647673/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-647673/3-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 647985

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220121-1	2018-04-F-20250306-01	Total Recoverable	Water	6010D	647673
240-220121-2	2018-03-F-20250306-01	Total Recoverable	Water	6010D	647673
240-220121-3	2018-02-F-20250306-01	Total Recoverable	Water	6010D	647673
MB 240-647673/1-A	Method Blank	Total Recoverable	Water	6010D	647673
LCS 240-647673/2-A	Lab Control Sample	Total Recoverable	Water	6010D	647673

Analysis Batch: 648025

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-647673/1-A	Method Blank	Total Recoverable	Water	6020B	647673
LCS 240-647673/3-A	Lab Control Sample	Total Recoverable	Water	6020B	647673

Analysis Batch: 648127

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220121-1	2018-04-F-20250306-01	Total Recoverable	Water	6020B	647673
240-220121-2	2018-03-F-20250306-01	Total Recoverable	Water	6020B	647673
240-220121-3	2018-02-F-20250306-01	Total Recoverable	Water	6020B	647673

Analysis Batch: 648380

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220121-2	2018-03-F-20250306-01	Total Recoverable	Water	6020B	647673
240-220121-3	2018-02-F-20250306-01	Total Recoverable	Water	6020B	647673

General Chemistry

Analysis Batch: 647823

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220121-1	2018-04-F-20250306-01	Total/NA	Water	300.0	
240-220121-1	2018-04-F-20250306-01	Total/NA	Water	300.0	
240-220121-2	2018-03-F-20250306-01	Total/NA	Water	300.0	
240-220121-2	2018-03-F-20250306-01	Total/NA	Water	300.0	
240-220121-3	2018-02-F-20250306-01	Total/NA	Water	300.0	
240-220121-3	2018-02-F-20250306-01	Total/NA	Water	300.0	
MB 240-647823/3	Method Blank	Total/NA	Water	300.0	
LCS 240-647823/4	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 647966

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220121-1	2018-04-F-20250306-01	Total/NA	Water	2540 C-2020	
240-220121-2	2018-03-F-20250306-01	Total/NA	Water	2540 C-2020	
240-220121-3	2018-02-F-20250306-01	Total/NA	Water	2540 C-2020	
MB 240-647966/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-647966/2	Lab Control Sample	Total/NA	Water	2540 C-2020	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-220121-1
Project/Site: Federal CCR Wells Snap Sampler - App3

Client Sample ID: 2018-04-F-20250306-01
Lab Sample ID: 240-220121-1

Date Collected: 03/06/25 10:25
Matrix: Water
Date Received: 03/08/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			647673	XWS6	EET CLE	03/11/25 14:00
Total Recoverable	Analysis	6010D		1	647985	AJC	EET CLE	03/12/25 22:11
Total Recoverable	Prep	3005A			647673	XWS6	EET CLE	03/11/25 14:00
Total Recoverable	Analysis	6020B		1	648127	RKT	EET CLE	03/13/25 15:40
Total/NA	Analysis	2540 C-2020		1	647966	TAV2	EET CLE	03/12/25 13:15
Total/NA	Analysis	300.0		1	647823	JWW	EET CLE	03/13/25 10:40
Total/NA	Analysis	300.0		5	647823	JWW	EET CLE	03/13/25 11:45

Client Sample ID: 2018-03-F-20250306-01
Lab Sample ID: 240-220121-2

Date Collected: 03/06/25 11:30
Matrix: Water
Date Received: 03/08/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			647673	XWS6	EET CLE	03/11/25 14:00
Total Recoverable	Analysis	6010D		1	647985	AJC	EET CLE	03/12/25 22:16
Total Recoverable	Prep	3005A			647673	XWS6	EET CLE	03/11/25 14:00
Total Recoverable	Analysis	6020B		1	648127	RKT	EET CLE	03/13/25 15:42
Total Recoverable	Prep	3005A			647673	XWS6	EET CLE	03/11/25 14:00
Total Recoverable	Analysis	6020B		5	648380	RKT	EET CLE	03/14/25 16:32
Total/NA	Analysis	2540 C-2020		1	647966	TAV2	EET CLE	03/12/25 13:15
Total/NA	Analysis	300.0		2	647823	JWW	EET CLE	03/13/25 12:07
Total/NA	Analysis	300.0		20	647823	JWW	EET CLE	03/13/25 12:29

Client Sample ID: 2018-02-F-20250306-01
Lab Sample ID: 240-220121-3

Date Collected: 03/06/25 12:45
Matrix: Water
Date Received: 03/08/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			647673	XWS6	EET CLE	03/11/25 14:00
Total Recoverable	Analysis	6010D		1	647985	AJC	EET CLE	03/12/25 22:20
Total Recoverable	Prep	3005A			647673	XWS6	EET CLE	03/11/25 14:00
Total Recoverable	Analysis	6020B		1	648127	RKT	EET CLE	03/13/25 15:45
Total Recoverable	Prep	3005A			647673	XWS6	EET CLE	03/11/25 14:00
Total Recoverable	Analysis	6020B		5	648380	RKT	EET CLE	03/14/25 16:35
Total/NA	Analysis	2540 C-2020		1	647966	TAV2	EET CLE	03/12/25 13:15
Total/NA	Analysis	300.0		5	647823	JWW	EET CLE	03/13/25 12:50
Total/NA	Analysis	300.0		25	647823	JWW	EET CLE	03/13/25 13:12

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-220121-1
Project/Site: Federal CCR Wells Snap Sampler - App3

Laboratory: Eurofins Cleveland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0806	12-31-26
Georgia	State	4062	02-27-26
Illinois	NELAP	200004	08-31-25
Iowa	State	421	06-01-25
Kansas	NELAP	E-10336	01-31-26
Kentucky (WW)	State	KY98016	12-31-25
Minnesota	NELAP	039-999-348	12-31-25
New Hampshire	NELAP	225024	09-30-25
New Jersey	NELAP	OH001	07-03-25
New York	NELAP	10975	04-01-25
Ohio	State	8303	11-04-25
Ohio VAP	State	ORELAP 4062	02-28-26
Oregon	NELAP	4062	02-27-26
Pennsylvania	NELAP	68-00340	08-31-25
Texas	NELAP	T104704517-22-19	08-31-25
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	09-14-25
West Virginia DEP	State	210	12-31-25
Wisconsin	State	399167560	08-31-25

Columbus

209 eurofins Environment Testing America

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

Chain of Custody Record

Client Information	Sampler: Bobby Casto	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s):	COC No: 240-93018-34502
Client Contact: Taylor Huffman	Phone: 740-373-4308	E-Mail: roxanne.cisneros@Eurofinset.com	State of Origin:	Page: Page 1 of 1
Company: Lightstone Generation Gavin Power LLC	PWSID:	Analysis Requested		Job #:
Address: 7397 OH-7	Due Date Requested:			Preservation Codes: A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
City: Cheshire	TAT Requested (days):			
State, Zip: OH, 45620	Compliance Project: Δ Yes Δ No			
Phone: 740-925-3171(Tel)	PO #: 2935505			
Email: taylor.huffman@lightstonegen.com	WO #:			
Project Name: Federal - CCR Wells Snap Sampler-App 3 and App 4	Project #: 24019633			
Site: Ohio	SSOW#:			Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Ww=water, S=solid, O=wastetoil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300.0, SM2540C	6020a, 6020b	Total Number of containers	Limited Volume App III and IV (Unpreserved with focus on TDS, Cl-, SO4 and F) Nitric Acid with focus on Ca and B)
			Preservation Code:				N	D		
208-04-F-20250306-C1	3-6-25	1025	G	W	N		1	1		*Extra Sample collected in 250ml unpreserved bottle*
2018-03-F-20250306-C1	3-6-25	1130	G	W	N		1	1		
2018-02-F-20250306-C1	3-6-25	1245	G	W	N		1	1		

240-220121 COC

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify)	Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Tony Curto	3-7-25 0930	Kleinfelder	Ashley Deal	3.7.25 11:40	ETA
Relinquished by: Ashley Deal	Date/Time: 3.7.25 1700	Company ETA	Received by: Martin	Date/Time: 3/8/25 800	Company EWL
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: 01/16/2019

Eurofins – Cleveland Sample Receipt Form/Narrative **Login # :**
Barberton Facility

Client Gavin Site Name

Cooler Received on 318125 Opened on 318125

Cooler unpacked by: KMartin

FedEx: 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other

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

Eurofins Cooler # EC 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 # 21 (CF +1.1 °C) Observed Cooler Temp. °C Corrected Cooler Temp °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	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# HC448976
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 # : _____

Eurofins - Cleveland Sample Receipt Multiple Cooler Form			
Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
(EC) Client Box Other	IR GUN #: 21	3 6	4 7	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #:	0 4	1 5	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #:	2 4	3.5	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #:	1 4	2 5	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #:	2 3	3 4	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #:	2 3	3 4	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #:	2 3	3.4	Wet Ice Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #:	2 4	3 5	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
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EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
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EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
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EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
☐ See Temperature Excursion Form				

3/8/2025

Login Container Summary Report

240-220121

3/17/2025

Temperature readings _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
2018-04-F-20250306-01	240-220121-A-1	Plastic 250ml - unpreserved				
2018-04-F-20250306-01	240-220121-B-1	Plastic 250ml - with Nitric Acid	<2			
2018-03-F-20250306-01	240-220121-A-2	Plastic 250ml - unpreserved				
2018-03-F-20250306-01	240-220121-B-2	Plastic 250ml - unpreserved				
2018-03-F-20250306-01	240-220121-C-2	Plastic 250ml - with Nitric Acid	<2			
2018-02-F-20250306-01	240-220121-A-3	Plastic 250ml - unpreserved				
2018-02-F-20250306-01	240-220121-B-3	Plastic 250ml - unpreserved				
2018-02-F-20250306-01	240-220121-C-3	Plastic 250ml - with Nitric Acid	<2			

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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620

Generated 4/10/2025 1:48:50 PM

JOB DESCRIPTION

Federal CCR Wells

JOB NUMBER

240-220127-1

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization

Roxanne Cisneros

Generated
4/10/2025 1:48:50 PM

Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(330)497-9396

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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-220127-1
Project/Site: Federal CCR Wells

Qualifiers

Metals

Qualifier	Qualifier Description
^2	Calibration Blank (ICB and/or CCB) is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Rad

Qualifier	Qualifier Description
G	The Sample MDC is greater than the requested RL.
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 Narrative
240-220127-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 3/8/2025 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 8 coolers at receipt time were 1.5°C, 2.5°C, 3.4°C, 3.4°C, 3.4°C, 3.5°C, 3.5°C and 4.7°C.

Metals
Method 6020B - Total Recoverable: The continuing calibration blank (CCB) for analytical batch 648127 contained sodium above the reporting limit (RL). None of the samples associated with this CCB contained sodium; therefore, re-analysis of samples were not performed. FIELD BLANK-001-F-20250304-01 (240-220127-3) and EB-001-F-20250304-01 (240-220127-4)

Method 6020B - Total Recoverable: The continuing calibration blank (CCB) for analytical batch 648127 contained sodium above the reporting limit (RL). Associated sample was not re-analyzed because results were greater than 10X the value found in the CCB.
9802-F-20250306-01 (240-220127-9)

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

General Chemistry
Method 300.0_28D: The following sample was diluted due to the nature of the sample matrix: 9631-F-20250305-01 (240-220127-6). Elevated reporting limits (RLs) are provided.

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

Gas Flow Proportional Counter
Method 9315_Ra226: Radium 226 prep batch 160-707485

The barium carrier recovery is outside the upper control limit (110%) for the following sample: 9631-F-20250305-01 (240-220127-6). There was physical evidence of matrix interference apparent during the initial preparation of the sample. The QC samples associated with the batch have acceptable carrier recovery indicating the presence of matrix interference.

Method 9315_Ra226: Radium 226 Batch 707485

160-707485
The Ba Carrier recovery was outside the upper control limit. This can be attributed to matrix interference noted during the initial preparation. The Laboratory Control Sample (LCS) has acceptable spike recovery, demonstrating proper method and instrument performance. Native has been applied, and the sample has been truncated to minimize any potential bias a high carrier recovery may have on the results. 9631-F-20250305-01 (240-220127-6)

Method 9320_Ra228: Radium 228 prep batch 160-707486

The barium carrier recovery is outside the upper control limit (110%) for the following sample: 9631-F-20250305-01 (240-220127-6). There was physical evidence of matrix interference apparent during the initial preparation of the sample. The QC samples associated with the batch have acceptable carrier recovery indicating the presence of matrix interference.

Method 9320_Ra228: Radium 228 Batch 707486

160-707486
The Ba Carrier recovery was outside the upper control limit. This can be attributed to matrix interference noted during the initial preparation. The Laboratory Control Sample (LCS) has acceptable spike recovery, demonstrating proper method and instrument performance. The sample has been truncated to minimize any potential bias a high carrier recovery may have on the results. 9631-F-20250305-01 (240-220127-6)

Method 9320_Ra228: Radium 228 Batch 707486

The MDC for the following sample(s) is flagged as failing; The laboratory considers the detection goal (requested limit) met when rounding to the appropriate place value. (240-220127-F-2-D DU)

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

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

Method Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-220127-1

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CLE
6020B	Metals (ICP/MS)	SW846	EET CLE
7470A	Mercury (CVAA)	SW846	EET CLE
2320 B-2021	Alkalinity	SM	EET CLE
2540 C-2020	Solids, Total Dissolved (TDS)	SM	EET CLE
300.0	Anions, Ion Chromatography	EPA	EET CLE
9315	Radium 226 by GFPC	SW846	EET SL
9320	Radium-228 (GFPC)	SW846	EET SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	EET SL
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CLE
7470A	Preparation, Mercury	SW846	EET CLE
PrecSep_0	Preparation, Precipitate Separation	None	EET SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	EET SL

Protocol References:

EPA = US Environmental Protection Agency

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:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

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

Sample Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-220127-1
Project/Site: Federal CCR Wells

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-220127-1	2022-03-F-20250304-01	Water	03/04/25 10:39	03/08/25 08:00
240-220127-2	9806-F-20250304-01	Water	03/04/25 14:30	03/08/25 08:00
240-220127-3	FIELD BLANK-001-F-20250304-01	Water	03/04/25 15:15	03/08/25 08:00
240-220127-4	EB-001-F-20250304-01	Water	03/04/25 15:20	03/08/25 08:00
240-220127-5	93108-F-20250305-01	Water	03/05/25 10:35	03/08/25 08:00
240-220127-6	9631-F-20250305-01	Water	03/05/25 12:01	03/08/25 08:00
240-220127-7	MW-17-F-20250305-01	Water	03/05/25 14:10	03/08/25 08:00
240-220127-8	DUP-002-F-20250305-01	Water	03/05/25 00:00	03/08/25 08:00
240-220127-9	9802-F-20250306-01	Water	03/06/25 15:08	03/08/25 08:00

Detection Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-220127-1

Client Sample ID: 2022-03-F-20250304-01 — Lab Sample ID: 240-220127-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	270		100	57	ug/L	1		6010D	Total Recoverable
Antimony	1.0	J	2.0	0.57	ug/L	1		6020B	Total Recoverable
Arsenic	2.2	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	1600		5.0	0.77	ug/L	1		6020B	Total Recoverable
Cadmium	0.16	J	1.0	0.077	ug/L	1		6020B	Total Recoverable
Calcium	400000		1000	250	ug/L	1		6020B	Total Recoverable
Chromium	7.4		5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	1.7		1.0	0.086	ug/L	1		6020B	Total Recoverable
Lead	1.2		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	670		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	150000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	170		5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	25000		1000	220	ug/L	1		6020B	Total Recoverable
Selenium	1.4	J	5.0	0.89	ug/L	1		6020B	Total Recoverable
Sodium	9500000		20000	18000	ug/L	20		6020B	Total Recoverable
Thallium	0.53	J	1.0	0.51	ug/L	1		6020B	Total Recoverable
Total Alkalinity	180		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	180		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	23000		1000	780	mg/L	1		2540 C-2020	Total/NA
Chloride	17000		100	13	mg/L	100		300.0	Total/NA
Sulfate	190		100	35	mg/L	100		300.0	Total/NA

Client Sample ID: 9806-F-20250304-01 — Lab Sample ID: 240-220127-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	300		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	0.83	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	42		5.0	0.77	ug/L	1		6020B	Total Recoverable
Calcium	3700		1000	250	ug/L	1		6020B	Total Recoverable
Cobalt	0.21	J	1.0	0.086	ug/L	1		6020B	Total Recoverable
Lithium	11		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	850	J	1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	11		5.0	1.1	ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland

Client Sample ID: 9806-F-20250304-01 (Continued) — Lab Sample ID: 240-220127-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	890	J	1000	220	ug/L	1		6020B	Total Recoverable
Sodium	350000		1000	880	ug/L	1		6020B	Total Recoverable
Total Alkalinity	340		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	290		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Carbonate Alkalinity as CaCO3	48		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	860		10	7.8	mg/L	1		2540 C-2020	Total/NA
Chloride	370		10	1.3	mg/L	10		300.0	Total/NA
Fluoride	1.3		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	120		1.0	0.35	mg/L	1		300.0	Total/NA

Client Sample ID: FIELD BLANK-001-F-20250304-01 — Lab Sample ID: 240-220127-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Alkalinity	4.9	J	5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	4.9	J	5.0	2.6	mg/L	1		2320 B-2021	Total/NA

Client Sample ID: EB-001-F-20250304-01 — Lab Sample ID: 240-220127-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Alkalinity	4.1	J	5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	4.1	J	5.0	2.6	mg/L	1		2320 B-2021	Total/NA

Client Sample ID: 93108-F-20250305-01 — Lab Sample ID: 240-220127-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	430		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	5.1		5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	470		5.0	0.77	ug/L	1		6020B	Total Recoverable
Calcium	15000		1000	250	ug/L	1		6020B	Total Recoverable
Lithium	40		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	4600		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	100		5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	2100		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	1400000		5000	4400	ug/L	5		6020B	Total Recoverable
Total Alkalinity	450		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	450		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	3100		50	39	mg/L	1		2540 C-2020	Total/NA
Chloride	1800		20	2.6	mg/L	20		300.0	Total/NA
Fluoride	3.1		0.25	0.12	mg/L	5		300.0	Total/NA
Sulfate	19		5.0	1.7	mg/L	5		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-220127-1

Client Sample ID: 9631-F-20250305-01

Lab Sample ID: 240-220127-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	370		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	2.8	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	43000		100	15	ug/L	20		6020B	Total Recoverable
Calcium	1500000		1000	250	ug/L	1		6020B	Total Recoverable
Chromium	1.2	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	1.8		1.0	0.086	ug/L	1		6020B	Total Recoverable
Lithium	350		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	460000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	2.5	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	24000		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	14000000		20000	18000	ug/L	20		6020B	Total Recoverable
Total Alkalinity	69		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	69		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	38000		1000	780	mg/L	1		2540 C-2020	Total/NA
Chloride	30000		1000	130	mg/L	1000		300.0	Total/NA

Client Sample ID: MW-17-F-20250305-01

Lab Sample ID: 240-220127-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	690		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	13		5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	210		5.0	0.77	ug/L	1		6020B	Total Recoverable
Calcium	200000		1000	250	ug/L	1		6020B	Total Recoverable
Cobalt	0.41	J	1.0	0.086	ug/L	1		6020B	Total Recoverable
Lithium	140		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	50000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	6.4		5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	7100		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	3600000		10000	8800	ug/L	10		6020B	Total Recoverable
Total Alkalinity	770		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	770		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	13000		100	78	mg/L	1		2540 C-2020	Total/NA
Chloride	7500		50	6.4	mg/L	50		300.0	Total/NA
Fluoride	0.31		0.050	0.024	mg/L	1		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-220127-1
Project/Site: Federal CCR Wells

Client Sample ID: DUP-002-F-20250305-01 — Lab Sample ID: 240-220127-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	730		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	14		5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	210		5.0	0.77	ug/L	1		6020B	Total Recoverable
Calcium	220000		1000	250	ug/L	1		6020B	Total Recoverable
Cobalt	0.43	J	1.0	0.086	ug/L	1		6020B	Total Recoverable
Lithium	150		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	58000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	6.7		5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	7500		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	3800000		10000	8800	ug/L	10		6020B	Total Recoverable
Total Alkalinity	750		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	750		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	13000		100	78	mg/L	1		2540 C-2020	Total/NA
Chloride	7100		50	6.4	mg/L	50		300.0	Total/NA
Fluoride	0.21	F1 F2	0.050	0.024	mg/L	1		300.0	Total/NA

Client Sample ID: 9802-F-20250306-01 — Lab Sample ID: 240-220127-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	200		100	57	ug/L	1		6010D	Total Recoverable
Barium	64		5.0	0.77	ug/L	1		6020B	Total Recoverable
Calcium	30000		1000	250	ug/L	1		6020B	Total Recoverable
Cobalt	0.31	J	1.0	0.086	ug/L	1		6020B	Total Recoverable
Lithium	13		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	8200		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	4.2	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	1600		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	300000	^2	1000	880	ug/L	1		6020B	Total Recoverable
Total Alkalinity	600		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	600		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	810		10	7.8	mg/L	1		2540 C-2020	Total/NA
Chloride	38		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.94		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	63		1.0	0.35	mg/L	1		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 2022-03-F-20250304-01
Date Collected: 03/04/25 10:39
Date Received: 03/08/25 08:00

Lab Sample ID: 240-220127-1
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	270		100	57	ug/L		03/11/25 14:00	03/12/25 15:43	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.0	J	2.0	0.57	ug/L		03/11/25 14:00	03/13/25 16:19	1
Arsenic	2.2	J	5.0	0.75	ug/L		03/11/25 14:00	03/13/25 16:19	1
Barium	1600		5.0	0.77	ug/L		03/11/25 14:00	03/13/25 16:19	1
Beryllium	ND		1.0	0.27	ug/L		03/11/25 14:00	03/13/25 16:19	1
Cadmium	0.16	J	1.0	0.077	ug/L		03/11/25 14:00	03/13/25 16:19	1
Calcium	400000		1000	250	ug/L		03/11/25 14:00	03/13/25 16:19	1
Chromium	7.4		5.0	1.2	ug/L		03/11/25 14:00	03/13/25 16:19	1
Cobalt	1.7		1.0	0.086	ug/L		03/11/25 14:00	03/13/25 16:19	1
Lead	1.2		1.0	0.45	ug/L		03/11/25 14:00	03/13/25 16:19	1
Lithium	670		8.0	3.4	ug/L		03/11/25 14:00	03/13/25 16:19	1
Magnesium	150000		1000	61	ug/L		03/11/25 14:00	03/13/25 16:19	1
Molybdenum	170		5.0	1.1	ug/L		03/11/25 14:00	03/13/25 16:19	1
Potassium	25000		1000	220	ug/L		03/11/25 14:00	03/13/25 16:19	1
Selenium	1.4	J	5.0	0.89	ug/L		03/11/25 14:00	03/13/25 16:19	1
Sodium	9500000		20000	18000	ug/L		03/11/25 14:00	03/14/25 16:38	20
Thallium	0.53	J	1.0	0.51	ug/L		03/11/25 14:00	03/13/25 16:19	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		03/11/25 14:00	03/12/25 19:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	180		5.0	2.6	mg/L			03/11/25 03:36	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	180		5.0	2.6	mg/L			03/11/25 03:36	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			03/11/25 03:36	1
Total Dissolved Solids (SM 2540 C-2020)	23000		1000	780	mg/L			03/10/25 09:22	1
Chloride (EPA 300.0)	17000		100	13	mg/L			03/13/25 00:14	100
Fluoride (EPA 300.0)	ND		5.0	2.4	mg/L			03/13/25 00:14	100
Sulfate (EPA 300.0)	190		100	35	mg/L			03/13/25 00:14	100

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	2.07		0.499	0.533	1.00	0.429	pCi/L	03/13/25 08:29	04/09/25 16:37	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.2*		*30 - 110*	*03/13/25 08:29*	*04/09/25 16:37*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	5.17		0.873	0.995	1.00	0.763	pCi/L	03/13/25 08:33	04/09/25 12:22	1

Client Sample ID: 2022-03-F-20250304-01
Date Collected: 03/04/25 10:39
Date Received: 03/08/25 08:00

Lab Sample ID: 240-220127-1
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.2*		*30 - 110*	*03/13/25 08:33*	*04/09/25 12:22*	*1*
Y Carrier	*71.0*		*30 - 110*	*03/13/25 08:33*	*04/09/25 12:22*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**7.24**		1.01	1.13	5.00	0.763	pCi/L		04/10/25 12:33	1

Client Sample ID: 9806-F-20250304-01
Date Collected: 03/04/25 14:30
Date Received: 03/08/25 08:00

Lab Sample ID: 240-220127-2
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**300**		100	57	ug/L		03/11/25 14:00	03/12/25 16:13	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		03/11/25 14:00	03/13/25 16:36	1
Arsenic	**0.83**	**J**	5.0	0.75	ug/L		03/11/25 14:00	03/13/25 16:36	1
Barium	**42**		5.0	0.77	ug/L		03/11/25 14:00	03/13/25 16:36	1
Beryllium	ND		1.0	0.27	ug/L		03/11/25 14:00	03/13/25 16:36	1
Cadmium	ND		1.0	0.077	ug/L		03/11/25 14:00	03/13/25 16:36	1
Calcium	**3700**		1000	250	ug/L		03/11/25 14:00	03/13/25 16:36	1
Chromium	ND		5.0	1.2	ug/L		03/11/25 14:00	03/13/25 16:36	1
Cobalt	**0.21**	**J**	1.0	0.086	ug/L		03/11/25 14:00	03/13/25 16:36	1
Lead	ND		1.0	0.45	ug/L		03/11/25 14:00	03/13/25 16:36	1
Lithium	**11**		8.0	3.4	ug/L		03/11/25 14:00	03/13/25 16:36	1
Magnesium	**850**	**J**	1000	61	ug/L		03/11/25 14:00	03/13/25 16:36	1
Molybdenum	**11**		5.0	1.1	ug/L		03/11/25 14:00	03/13/25 16:36	1
Potassium	**890**	**J**	1000	220	ug/L		03/11/25 14:00	03/13/25 16:36	1
Selenium	ND		5.0	0.89	ug/L		03/11/25 14:00	03/13/25 16:36	1
Sodium	**350000**		1000	880	ug/L		03/11/25 14:00	03/13/25 16:36	1
Thallium	ND		1.0	0.51	ug/L		03/11/25 14:00	03/13/25 16:36	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		03/11/25 14:00	03/12/25 19:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	**340**		5.0	2.6	mg/L			03/11/25 03:42	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**290**		5.0	2.6	mg/L			03/11/25 03:42	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**48**		5.0	2.6	mg/L			03/11/25 03:42	1
Total Dissolved Solids (SM 2540 C-2020)	**860**		10	7.8	mg/L			03/10/25 09:22	1
Chloride (EPA 300.0)	**370**		10	1.3	mg/L			03/13/25 01:00	10
Fluoride (EPA 300.0)	**1.3**		0.050	0.024	mg/L			03/13/25 00:32	1
Sulfate (EPA 300.0)	**120**		1.0	0.35	mg/L			03/13/25 00:32	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0445	U	0.178	0.178	1.00	0.346	pCi/L	03/13/25 08:29	04/09/25 16:37	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.7*		*30 - 110*	*03/13/25 08:29*	*04/09/25 16:37*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.556	U	0.482	0.485	1.00	0.761	pCi/L	03/13/25 08:33	04/09/25 12:07	1

Client Sample ID: 9806-F-20250304-01
Date Collected: 03/04/25 14:30
Date Received: 03/08/25 08:00

Lab Sample ID: 240-220127-2
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.7*		*30 - 110*	*03/13/25 08:33*	*04/09/25 12:07*	*1*
Y Carrier	*80.4*		*30 - 110*	*03/13/25 08:33*	*04/09/25 12:07*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.601	U	0.514	0.517	5.00	0.761	pCi/L		04/10/25 12:33	1

Client Sample ID: FIELD BLANK-001-F-20250304-01
Date Collected: 03/04/25 15:15
Date Received: 03/08/25 08:00

Lab Sample ID: 240-220127-3
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		03/11/25 14:00	03/12/25 16:48	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		03/11/25 14:00	03/13/25 17:15	1
Arsenic	ND		5.0	0.75	ug/L		03/11/25 14:00	03/13/25 17:15	1
Barium	ND		5.0	0.77	ug/L		03/11/25 14:00	03/13/25 17:15	1
Beryllium	ND		1.0	0.27	ug/L		03/11/25 14:00	03/13/25 17:15	1
Cadmium	ND		1.0	0.077	ug/L		03/11/25 14:00	03/13/25 17:15	1
Calcium	ND		1000	250	ug/L		03/11/25 14:00	03/13/25 17:15	1
Chromium	ND		5.0	1.2	ug/L		03/11/25 14:00	03/13/25 17:15	1
Cobalt	ND		1.0	0.086	ug/L		03/11/25 14:00	03/13/25 17:15	1
Lead	ND		1.0	0.45	ug/L		03/11/25 14:00	03/13/25 17:15	1
Lithium	ND		8.0	3.4	ug/L		03/11/25 14:00	03/13/25 17:15	1
Magnesium	ND		1000	61	ug/L		03/11/25 14:00	03/13/25 17:15	1
Molybdenum	ND		5.0	1.1	ug/L		03/11/25 14:00	03/13/25 17:15	1
Potassium	ND		1000	220	ug/L		03/11/25 14:00	03/13/25 17:15	1
Selenium	ND		5.0	0.89	ug/L		03/11/25 14:00	03/13/25 17:15	1
Sodium	ND		1000	880	ug/L		03/11/25 14:00	03/13/25 17:15	1
Thallium	ND		1.0	0.51	ug/L		03/11/25 14:00	03/13/25 17:15	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		03/11/25 14:00	03/12/25 19:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	**4.9**	**J**	5.0	2.6	mg/L			03/11/25 03:48	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**4.9**	**J**	5.0	2.6	mg/L			03/11/25 03:48	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			03/11/25 03:48	1
Total Dissolved Solids (SM 2540 C-2020)	ND		10	7.8	mg/L			03/10/25 09:22	1
Chloride (EPA 300.0)	ND		1.0	0.13	mg/L			03/13/25 01:09	1
Fluoride (EPA 300.0)	ND		0.050	0.024	mg/L			03/13/25 01:09	1
Sulfate (EPA 300.0)	ND		1.0	0.35	mg/L			03/13/25 01:09	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.385**		0.257	0.259	1.00	0.346	pCi/L	03/13/25 08:29	04/09/25 16:37	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.3*		*30 - 110*	*03/13/25 08:29*	*04/09/25 16:37*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0642	U	0.437	0.437	1.00	0.792	pCi/L	03/13/25 08:33	04/09/25 12:24	1

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-220127-1

Client Sample ID: FIELD BLANK-001-F-20250304-01
Date Collected: 03/04/25 15:15
Date Received: 03/08/25 08:00

Lab Sample ID: 240-220127-3
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.3*		*30 - 110*	*03/13/25 08:33*	*04/09/25 12:24*	*1*
Y Carrier	*80.0*		*30 - 110*	*03/13/25 08:33*	*04/09/25 12:24*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.449	U	0.507	0.508	5.00	0.792	pCi/L		04/10/25 12:33	1

Client Sample ID: EB-001-F-20250304-01

Lab Sample ID: 240-220127-4

Date Collected: 03/04/25 15:20

Matrix: Water

Date Received: 03/08/25 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		03/11/25 14:00	03/12/25 16:52	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		03/11/25 14:00	03/13/25 17:18	1
Arsenic	ND		5.0	0.75	ug/L		03/11/25 14:00	03/13/25 17:18	1
Barium	ND		5.0	0.77	ug/L		03/11/25 14:00	03/13/25 17:18	1
Beryllium	ND		1.0	0.27	ug/L		03/11/25 14:00	03/13/25 17:18	1
Cadmium	ND		1.0	0.077	ug/L		03/11/25 14:00	03/13/25 17:18	1
Calcium	ND		1000	250	ug/L		03/11/25 14:00	03/13/25 17:18	1
Chromium	ND		5.0	1.2	ug/L		03/11/25 14:00	03/13/25 17:18	1
Cobalt	ND		1.0	0.086	ug/L		03/11/25 14:00	03/13/25 17:18	1
Lead	ND		1.0	0.45	ug/L		03/11/25 14:00	03/13/25 17:18	1
Lithium	ND		8.0	3.4	ug/L		03/11/25 14:00	03/13/25 17:18	1
Magnesium	ND		1000	61	ug/L		03/11/25 14:00	03/13/25 17:18	1
Molybdenum	ND		5.0	1.1	ug/L		03/11/25 14:00	03/13/25 17:18	1
Potassium	ND		1000	220	ug/L		03/11/25 14:00	03/13/25 17:18	1
Selenium	ND		5.0	0.89	ug/L		03/11/25 14:00	03/13/25 17:18	1
Sodium	ND		1000	880	ug/L		03/11/25 14:00	03/13/25 17:18	1
Thallium	ND		1.0	0.51	ug/L		03/11/25 14:00	03/13/25 17:18	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		03/11/25 14:00	03/12/25 19:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	**4.1**	**J**	5.0	2.6	mg/L			03/13/25 20:50	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**4.1**	**J**	5.0	2.6	mg/L			03/13/25 20:50	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			03/13/25 20:50	1
Total Dissolved Solids (SM 2540 C-2020)	ND		10	7.8	mg/L			03/10/25 09:22	1
Chloride (EPA 300.0)	ND		1.0	0.13	mg/L			03/13/25 01:18	1
Fluoride (EPA 300.0)	ND		0.050	0.024	mg/L			03/13/25 01:18	1
Sulfate (EPA 300.0)	ND		1.0	0.35	mg/L			03/13/25 01:18	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.201	U	0.111	0.112	1.00	0.365	pCi/L	03/13/25 08:29	04/09/25 16:37	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.7*		*30 - 110*	*03/13/25 08:29*	*04/09/25 16:37*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.310	U	0.485	0.486	1.00	0.820	pCi/L	03/13/25 08:33	04/09/25 12:25	1

Client Sample ID: EB-001-F-20250304-01
Date Collected: 03/04/25 15:20
Date Received: 03/08/25 08:00

Lab Sample ID: 240-220127-4
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.7*		*30 - 110*	*03/13/25 08:33*	*04/09/25 12:25*	*1*
Y Carrier	*83.4*		*30 - 110*	*03/13/25 08:33*	*04/09/25 12:25*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.109	U	0.498	0.499	5.00	0.820	pCi/L		04/10/25 12:33	1

Client Sample ID: 93108-F-20250305-01
Date Collected: 03/05/25 10:35
Date Received: 03/08/25 08:00

Lab Sample ID: 240-220127-5
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**430**		100	57	ug/L		03/11/25 14:00	03/12/25 17:05	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		03/11/25 14:00	03/13/25 17:21	1
Arsenic	**5.1**		5.0	0.75	ug/L		03/11/25 14:00	03/13/25 17:21	1
Barium	**470**		5.0	0.77	ug/L		03/11/25 14:00	03/13/25 17:21	1
Beryllium	ND		1.0	0.27	ug/L		03/11/25 14:00	03/13/25 17:21	1
Cadmium	ND		1.0	0.077	ug/L		03/11/25 14:00	03/13/25 17:21	1
Calcium	**15000**		1000	250	ug/L		03/11/25 14:00	03/13/25 17:21	1
Chromium	ND		5.0	1.2	ug/L		03/11/25 14:00	03/13/25 17:21	1
Cobalt	ND		1.0	0.086	ug/L		03/11/25 14:00	03/13/25 17:21	1
Lead	ND		1.0	0.45	ug/L		03/11/25 14:00	03/13/25 17:21	1
Lithium	**40**		8.0	3.4	ug/L		03/11/25 14:00	03/13/25 17:21	1
Magnesium	**4600**		1000	61	ug/L		03/11/25 14:00	03/13/25 17:21	1
Molybdenum	**100**		5.0	1.1	ug/L		03/11/25 14:00	03/13/25 17:21	1
Potassium	**2100**		1000	220	ug/L		03/11/25 14:00	03/13/25 17:21	1
Selenium	ND		5.0	0.89	ug/L		03/11/25 14:00	03/13/25 17:21	1
Sodium	**1400000**		5000	4400	ug/L		03/11/25 14:00	03/14/25 16:41	5
Thallium	ND		1.0	0.51	ug/L		03/11/25 14:00	03/13/25 17:21	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		03/11/25 14:00	03/12/25 19:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	**450**		5.0	2.6	mg/L			03/11/25 04:14	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**450**		5.0	2.6	mg/L			03/11/25 04:14	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			03/11/25 04:14	1
Total Dissolved Solids (SM 2540 C-2020)	**3100**		50	39	mg/L			03/10/25 14:28	1
Chloride (EPA 300.0)	**1800**		20	2.6	mg/L			03/13/25 01:36	20
Fluoride (EPA 300.0)	**3.1**		0.25	0.12	mg/L			03/13/25 01:27	5
Sulfate (EPA 300.0)	**19**		5.0	1.7	mg/L			03/13/25 01:27	5

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.705**		0.349	0.354	1.00	0.452	pCi/L	03/13/25 08:29	04/09/25 16:37	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.5*		*30 - 110*	*03/13/25 08:29*	*04/09/25 16:37*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.666	U	0.543	0.546	1.00	0.856	pCi/L	03/13/25 08:33	04/09/25 12:24	1

Client Sample ID: 93108-F-20250305-01
Date Collected: 03/05/25 10:35
Date Received: 03/08/25 08:00

Lab Sample ID: 240-220127-5
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.5*		*30 - 110*	*03/13/25 08:33*	*04/09/25 12:24*	*1*
Y Carrier	*79.6*		*30 - 110*	*03/13/25 08:33*	*04/09/25 12:24*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**1.37**		0.645	0.651	5.00	0.856	pCi/L		04/10/25 12:33	1

Client Sample ID: 9631-F-20250305-01
Date Collected: 03/05/25 12:01
Date Received: 03/08/25 08:00

Lab Sample ID: 240-220127-6
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**370**		100	57	ug/L		03/11/25 14:00	03/12/25 17:09	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		03/11/25 14:00	03/13/25 17:24	1
Arsenic	**2.8**	**J**	5.0	0.75	ug/L		03/11/25 14:00	03/13/25 17:24	1
Barium	**43000**		100	15	ug/L		03/11/25 14:00	03/14/25 16:43	20
Beryllium	ND		1.0	0.27	ug/L		03/11/25 14:00	03/13/25 17:24	1
Cadmium	ND		1.0	0.077	ug/L		03/11/25 14:00	03/13/25 17:24	1
Calcium	**1500000**		1000	250	ug/L		03/11/25 14:00	03/13/25 17:24	1
Chromium	**1.2**	**J**	5.0	1.2	ug/L		03/11/25 14:00	03/13/25 17:24	1
Cobalt	**1.8**		1.0	0.086	ug/L		03/11/25 14:00	03/13/25 17:24	1
Lead	ND		1.0	0.45	ug/L		03/11/25 14:00	03/13/25 17:24	1
Lithium	**350**		8.0	3.4	ug/L		03/11/25 14:00	03/13/25 17:24	1
Magnesium	**460000**		1000	61	ug/L		03/11/25 14:00	03/13/25 17:24	1
Molybdenum	**2.5**	**J**	5.0	1.1	ug/L		03/11/25 14:00	03/13/25 17:24	1
Potassium	**24000**		1000	220	ug/L		03/11/25 14:00	03/13/25 17:24	1
Selenium	ND		5.0	0.89	ug/L		03/11/25 14:00	03/13/25 17:24	1
Sodium	**14000000**		20000	18000	ug/L		03/11/25 14:00	03/14/25 16:43	20
Thallium	ND		1.0	0.51	ug/L		03/11/25 14:00	03/13/25 17:24	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		03/11/25 14:00	03/12/25 19:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	**69**		5.0	2.6	mg/L			03/11/25 04:20	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**69**		5.0	2.6	mg/L			03/11/25 04:20	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			03/11/25 04:20	1
Total Dissolved Solids (SM 2540 C-2020)	**38000**		1000	780	mg/L			03/10/25 14:28	1
Chloride (EPA 300.0)	**30000**		1000	130	mg/L			03/13/25 01:55	1000
Fluoride (EPA 300.0)	ND		5.0	2.4	mg/L			03/13/25 01:45	100
Sulfate (EPA 300.0)	ND		100	35	mg/L			03/13/25 01:45	100

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**25.0**		1.67	2.80	1.00	0.511	pCi/L	03/13/25 08:29	04/09/25 16:37	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*433*	*X*	*30 - 110*	*03/13/25 08:29*	*04/09/25 16:37*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**73.7**		2.61	7.26	1.00	0.674	pCi/L	03/13/25 08:33	04/09/25 12:24	1

Client Sample ID: 9631-F-20250305-01
Date Collected: 03/05/25 12:01
Date Received: 03/08/25 08:00

Lab Sample ID: 240-220127-6
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*433*	*X*	*30 - 110*	*03/13/25 08:33*	*04/09/25 12:24*	*1*
Y Carrier	*83.7*		*30 - 110*	*03/13/25 08:33*	*04/09/25 12:24*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**98.6**		3.10	7.78	5.00	0.674	pCi/L		04/10/25 12:33	1

Client Sample ID: MW-17-F-20250305-01
Date Collected: 03/05/25 14:10
Date Received: 03/08/25 08:00

Lab Sample ID: 240-220127-7
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**690**		100	57	ug/L		03/11/25 14:00	03/12/25 17:14	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		03/11/25 14:00	03/13/25 17:27	1
Arsenic	**13**		5.0	0.75	ug/L		03/11/25 14:00	03/13/25 17:27	1
Barium	**210**		5.0	0.77	ug/L		03/11/25 14:00	03/13/25 17:27	1
Beryllium	ND		1.0	0.27	ug/L		03/11/25 14:00	03/13/25 17:27	1
Cadmium	ND		1.0	0.077	ug/L		03/11/25 14:00	03/13/25 17:27	1
Calcium	**200000**		1000	250	ug/L		03/11/25 14:00	03/13/25 17:27	1
Chromium	ND		5.0	1.2	ug/L		03/11/25 14:00	03/13/25 17:27	1
Cobalt	**0.41**	**J**	1.0	0.086	ug/L		03/11/25 14:00	03/13/25 17:27	1
Lead	ND		1.0	0.45	ug/L		03/11/25 14:00	03/13/25 17:27	1
Lithium	**140**		8.0	3.4	ug/L		03/11/25 14:00	03/13/25 17:27	1
Magnesium	**50000**		1000	61	ug/L		03/11/25 14:00	03/13/25 17:27	1
Molybdenum	**6.4**		5.0	1.1	ug/L		03/11/25 14:00	03/13/25 17:27	1
Potassium	**7100**		1000	220	ug/L		03/11/25 14:00	03/13/25 17:27	1
Selenium	ND		5.0	0.89	ug/L		03/11/25 14:00	03/13/25 17:27	1
Sodium	**3600000**		10000	8800	ug/L		03/11/25 14:00	03/14/25 16:46	10
Thallium	ND		1.0	0.51	ug/L		03/11/25 14:00	03/13/25 17:27	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		03/11/25 14:00	03/12/25 19:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	**770**		5.0	2.6	mg/L			03/11/25 04:25	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**770**		5.0	2.6	mg/L			03/11/25 04:25	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			03/11/25 04:25	1
Total Dissolved Solids (SM 2540 C-2020)	**13000**		100	78	mg/L			03/10/25 14:28	1
Chloride (EPA 300.0)	**7500**		50	6.4	mg/L			03/19/25 19:59	50
Fluoride (EPA 300.0)	**0.31**		0.050	0.024	mg/L			03/13/25 02:04	1
Sulfate (EPA 300.0)	ND		1.0	0.35	mg/L			03/13/25 02:04	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.513**		0.300	0.303	1.00	0.409	pCi/L	03/13/25 08:29	04/09/25 16:28	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.5*		*30 - 110*	*03/13/25 08:29*	*04/09/25 16:28*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.114	U	0.348	0.348	1.00	0.619	pCi/L	03/13/25 08:33	04/09/25 12:25	1

Client Sample ID: MW-17-F-20250305-01
Date Collected: 03/05/25 14:10
Date Received: 03/08/25 08:00

Lab Sample ID: 240-220127-7
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.5*		*30 - 110*	*03/13/25 08:33*	*04/09/25 12:25*	*1*
Y Carrier	*80.4*		*30 - 110*	*03/13/25 08:33*	*04/09/25 12:25*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.627**		0.459	0.461	5.00	0.619	pCi/L		04/10/25 12:33	1

Client Sample ID: DUP-002-F-20250305-01
Date Collected: 03/05/25 00:00
Date Received: 03/08/25 08:00

Lab Sample ID: 240-220127-8
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**730**		100	57	ug/L		03/11/25 14:00	03/12/25 17:18	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		03/11/25 14:00	03/13/25 17:30	1
Arsenic	**14**		5.0	0.75	ug/L		03/11/25 14:00	03/13/25 17:30	1
Barium	**210**		5.0	0.77	ug/L		03/11/25 14:00	03/13/25 17:30	1
Beryllium	ND		1.0	0.27	ug/L		03/11/25 14:00	03/13/25 17:30	1
Cadmium	ND		1.0	0.077	ug/L		03/11/25 14:00	03/13/25 17:30	1
Calcium	**220000**		1000	250	ug/L		03/11/25 14:00	03/13/25 17:30	1
Chromium	ND		5.0	1.2	ug/L		03/11/25 14:00	03/13/25 17:30	1
Cobalt	**0.43**	**J**	1.0	0.086	ug/L		03/11/25 14:00	03/13/25 17:30	1
Lead	ND		1.0	0.45	ug/L		03/11/25 14:00	03/13/25 17:30	1
Lithium	**150**		8.0	3.4	ug/L		03/11/25 14:00	03/13/25 17:30	1
Magnesium	**58000**		1000	61	ug/L		03/11/25 14:00	03/13/25 17:30	1
Molybdenum	**6.7**		5.0	1.1	ug/L		03/11/25 14:00	03/13/25 17:30	1
Potassium	**7500**		1000	220	ug/L		03/11/25 14:00	03/13/25 17:30	1
Selenium	ND		5.0	0.89	ug/L		03/11/25 14:00	03/13/25 17:30	1
Sodium	**3800000**		10000	8800	ug/L		03/11/25 14:00	03/14/25 16:49	10
Thallium	ND		1.0	0.51	ug/L		03/11/25 14:00	03/13/25 17:30	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		03/11/25 14:00	03/12/25 19:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	**750**		5.0	2.6	mg/L			03/11/25 04:34	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**750**		5.0	2.6	mg/L			03/11/25 04:34	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			03/11/25 04:34	1
Total Dissolved Solids (SM 2540 C-2020)	**13000**		100	78	mg/L			03/10/25 14:28	1
Chloride (EPA 300.0)	**7100**		50	6.4	mg/L			03/19/25 20:08	50
Fluoride (EPA 300.0)	**0.21**	**F1 F2**	0.050	0.024	mg/L			03/13/25 02:13	1
Sulfate (EPA 300.0)	ND	F1	1.0	0.35	mg/L			03/13/25 02:13	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.497**		0.274	0.278	1.00	0.351	pCi/L	03/13/25 08:29	04/09/25 16:28	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.3*		*30 - 110*	*03/13/25 08:29*	*04/09/25 16:28*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.140	U	0.347	0.347	1.00	0.613	pCi/L	03/13/25 08:33	04/09/25 12:25	1

Client Sample ID: DUP-002-F-20250305-01
Date Collected: 03/05/25 00:00
Date Received: 03/08/25 08:00

Lab Sample ID: 240-220127-8
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.3*		*30 - 110*	*03/13/25 08:33*	*04/09/25 12:25*	*1*
Y Carrier	*78.1*		*30 - 110*	*03/13/25 08:33*	*04/09/25 12:25*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.637**		0.442	0.445	5.00	0.613	pCi/L		04/10/25 12:33	1

Client Sample ID: 9802-F-20250306-01
Date Collected: 03/06/25 15:08
Date Received: 03/08/25 08:00

Lab Sample ID: 240-220127-9
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**200**		100	57	ug/L		03/11/25 14:00	03/12/25 17:22	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		03/11/25 14:00	03/13/25 17:33	1
Arsenic	ND		5.0	0.75	ug/L		03/11/25 14:00	03/13/25 17:33	1
Barium	**64**		5.0	0.77	ug/L		03/11/25 14:00	03/13/25 17:33	1
Beryllium	ND		1.0	0.27	ug/L		03/11/25 14:00	03/13/25 17:33	1
Cadmium	ND		1.0	0.077	ug/L		03/11/25 14:00	03/13/25 17:33	1
Calcium	**30000**		1000	250	ug/L		03/11/25 14:00	03/13/25 17:33	1
Chromium	ND		5.0	1.2	ug/L		03/11/25 14:00	03/13/25 17:33	1
Cobalt	**0.31**	**J**	1.0	0.086	ug/L		03/11/25 14:00	03/13/25 17:33	1
Lead	ND		1.0	0.45	ug/L		03/11/25 14:00	03/13/25 17:33	1
Lithium	**13**		8.0	3.4	ug/L		03/11/25 14:00	03/13/25 17:33	1
Magnesium	**8200**		1000	61	ug/L		03/11/25 14:00	03/13/25 17:33	1
Molybdenum	**4.2**	**J**	5.0	1.1	ug/L		03/11/25 14:00	03/13/25 17:33	1
Potassium	**1600**		1000	220	ug/L		03/11/25 14:00	03/13/25 17:33	1
Selenium	ND		5.0	0.89	ug/L		03/11/25 14:00	03/13/25 17:33	1
Sodium	**300000**	**^2**	1000	880	ug/L		03/11/25 14:00	03/13/25 17:33	1
Thallium	ND		1.0	0.51	ug/L		03/11/25 14:00	03/13/25 17:33	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		03/11/25 14:00	03/12/25 19:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	**600**		5.0	2.6	mg/L			03/11/25 04:42	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**600**		5.0	2.6	mg/L			03/11/25 04:42	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			03/11/25 04:42	1
Total Dissolved Solids (SM 2540 C-2020)	**810**		10	7.8	mg/L			03/12/25 13:15	1
Chloride (EPA 300.0)	**38**		1.0	0.13	mg/L			03/13/25 02:59	1
Fluoride (EPA 300.0)	**0.94**		0.050	0.024	mg/L			03/13/25 02:59	1
Sulfate (EPA 300.0)	**63**		1.0	0.35	mg/L			03/13/25 02:59	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0682	U	0.160	0.160	1.00	0.362	pCi/L	03/13/25 08:29	04/09/25 16:28	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.2*		*30 - 110*	*03/13/25 08:29*	*04/09/25 16:28*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0586	U	0.251	0.251	1.00	0.498	pCi/L	03/13/25 08:33	04/09/25 12:25	1

Client Sample ID: 9802-F-20250306-01
Date Collected: 03/06/25 15:08
Date Received: 03/08/25 08:00

Lab Sample ID: 240-220127-9
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.2*		*30 - 110*	*03/13/25 08:33*	*04/09/25 12:25*	*1*
Y Carrier	*84.5*		*30 - 110*	*03/13/25 08:33*	*04/09/25 12:25*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.127	U	0.298	0.298	5.00	0.498	pCi/L		04/10/25 12:33	1

Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-220127-1
Project/Site: Federal CCR Wells

Method: 9315 - Radium 226 by GFPC

Matrix: Water **Prep Type: Total/NA**

		Percent Yield (Acceptance Limits)
		Ba
Lab Sample ID	Client Sample ID	(30-110)
240-220127-1	2022-03-F-20250304-01	93.2
240-220127-2	9806-F-20250304-01	80.7
240-220127-2 DU	9806-F-20250304-01	71.6
240-220127-3	FIELD BLANK-001-F-20250304-01	81.3
240-220127-4	EB-001-F-20250304-01	85.7
240-220127-5	93108-F-20250305-01	86.5
240-220127-6	9631-F-20250305-01	433 X
240-220127-7	MW-17-F-20250305-01	87.5
240-220127-8	DUP-002-F-20250305-01	88.3
240-220127-9	9802-F-20250306-01	92.2
LCS 160-707485/2-A	Lab Control Sample	85.9
MB 160-707485/1-A	Method Blank	80.5

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	(30-110)	(30-110)
240-220127-1	2022-03-F-20250304-01	93.2	71.0
240-220127-2	9806-F-20250304-01	80.7	80.4
240-220127-2 DU	9806-F-20250304-01	71.6	75.9
240-220127-3	FIELD BLANK-001-F-20250304-01	81.3	80.0
240-220127-4	EB-001-F-20250304-01	85.7	83.4
240-220127-5	93108-F-20250305-01	86.5	79.6
240-220127-6	9631-F-20250305-01	433 X	83.7
240-220127-7	MW-17-F-20250305-01	87.5	80.4
240-220127-8	DUP-002-F-20250305-01	88.3	78.1
240-220127-9	9802-F-20250306-01	92.2	84.5
LCS 160-707486/2-A	Lab Control Sample	85.9	78.1
MB 160-707486/1-A	Method Blank	80.5	79.6

Tracer/Carrier Legend

Ba = Ba Carrier
Y = Y Carrier

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-647670/1-A
Matrix: Water
Analysis Batch: 648015

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 647670

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		03/11/25 14:00	03/12/25 15:35	1

Lab Sample ID: LCS 240-647670/2-A
Matrix: Water
Analysis Batch: 648015

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 647670

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Boron			1000	1020		ug/L		102	80 - 120		

Lab Sample ID: 240-220127-1 MS
Matrix: Water
Analysis Batch: 648015

Client Sample ID: 2022-03-F-20250304-01
Prep Type: Total Recoverable
Prep Batch: 647670

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Boron	270		1000	1180		ug/L		91	75 - 125		

Lab Sample ID: 240-220127-1 MSD
Matrix: Water
Analysis Batch: 648015

Client Sample ID: 2022-03-F-20250304-01
Prep Type: Total Recoverable
Prep Batch: 647670

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	270		1000	1290		ug/L		102	75 - 125	8	20

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-647670/1-A
Matrix: Water
Analysis Batch: 648127

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 647670

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		03/11/25 14:00	03/13/25 16:13	1
Arsenic	ND		5.0	0.75	ug/L		03/11/25 14:00	03/13/25 16:13	1
Barium	ND		5.0	0.77	ug/L		03/11/25 14:00	03/13/25 16:13	1
Beryllium	ND		1.0	0.27	ug/L		03/11/25 14:00	03/13/25 16:13	1
Cadmium	ND		1.0	0.077	ug/L		03/11/25 14:00	03/13/25 16:13	1
Calcium	ND		1000	250	ug/L		03/11/25 14:00	03/13/25 16:13	1
Chromium	ND		5.0	1.2	ug/L		03/11/25 14:00	03/13/25 16:13	1
Cobalt	ND		1.0	0.086	ug/L		03/11/25 14:00	03/13/25 16:13	1
Lead	ND		1.0	0.45	ug/L		03/11/25 14:00	03/13/25 16:13	1
Lithium	ND		8.0	3.4	ug/L		03/11/25 14:00	03/13/25 16:13	1
Magnesium	ND		1000	61	ug/L		03/11/25 14:00	03/13/25 16:13	1
Molybdenum	ND		5.0	1.1	ug/L		03/11/25 14:00	03/13/25 16:13	1
Potassium	ND		1000	220	ug/L		03/11/25 14:00	03/13/25 16:13	1
Selenium	ND		5.0	0.89	ug/L		03/11/25 14:00	03/13/25 16:13	1
Sodium	ND		1000	880	ug/L		03/11/25 14:00	03/13/25 16:13	1
Thallium	ND		1.0	0.51	ug/L		03/11/25 14:00	03/13/25 16:13	1

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

Lab Sample ID: LCS 240-647670/3-A
Matrix: Water
Analysis Batch: 648127

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 647670

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	94.6		ug/L		95	80 - 120
Arsenic	1000	976		ug/L		98	80 - 120
Barium	1000	942		ug/L		94	80 - 120
Beryllium	500	449		ug/L		90	80 - 120
Cadmium	500	459		ug/L		92	80 - 120
Calcium	25000	23800		ug/L		95	80 - 120
Chromium	500	489		ug/L		98	80 - 120
Cobalt	500	469		ug/L		94	80 - 120
Lead	500	513		ug/L		103	80 - 120
Lithium	500	476		ug/L		95	80 - 120
Magnesium	25000	23800		ug/L		95	80 - 120
Molybdenum	500	476		ug/L		95	80 - 120
Potassium	25000	24900		ug/L		99	80 - 120
Selenium	1000	958		ug/L		96	80 - 120
Sodium	25000	23800		ug/L		95	80 - 120
Thallium	1000	1070		ug/L		107	80 - 120

Lab Sample ID: 240-220127-2 MS
Matrix: Water
Analysis Batch: 648127

Client Sample ID: 9806-F-20250304-01
Prep Type: Total Recoverable
Prep Batch: 647670

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	ND		100	98.6		ug/L		99	80 - 120
Arsenic	0.83	J	1000	1030		ug/L		103	80 - 120
Barium	42		1000	1010		ug/L		97	80 - 120
Beryllium	ND		500	482		ug/L		96	80 - 120
Cadmium	ND		500	465		ug/L		93	80 - 120
Calcium	3700		25000	28400		ug/L		99	80 - 120
Chromium	ND		500	499		ug/L		100	80 - 120
Cobalt	0.21	J	500	489		ug/L		98	80 - 120
Lead	ND		500	525		ug/L		105	80 - 120
Lithium	11		500	501		ug/L		98	80 - 120
Magnesium	850	J	25000	25800		ug/L		100	80 - 120
Molybdenum	11		500	514		ug/L		101	80 - 120
Potassium	890	J	25000	26800		ug/L		104	80 - 120
Selenium	ND		1000	977		ug/L		98	80 - 120
Sodium	350000		25000	361000	4	ug/L		37	80 - 120
Thallium	ND		1000	1110		ug/L		111	80 - 120

Lab Sample ID: 240-220127-2 MSD
Matrix: Water
Analysis Batch: 648127

Client Sample ID: 9806-F-20250304-01
Prep Type: Total Recoverable
Prep Batch: 647670

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	ND		100	98.8		ug/L		99	80 - 120	0	20
Arsenic	0.83	J	1000	1020		ug/L		101	80 - 120	1	20
Barium	42		1000	1020		ug/L		98	80 - 120	1	20
Beryllium	ND		500	489		ug/L		98	80 - 120	2	20
Cadmium	ND		500	469		ug/L		94	80 - 120	1	20

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

Lab Sample ID: 240-220127-2 MSD
Matrix: Water
Analysis Batch: 648127

Client Sample ID: 9806-F-20250304-01
Prep Type: Total Recoverable
Prep Batch: 647670

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	3700		25000	28500		ug/L		99	80 - 120	0	20
Chromium	ND		500	504		ug/L		101	80 - 120	1	20
Cobalt	0.21	J	500	489		ug/L		98	80 - 120	0	20
Lead	ND		500	524		ug/L		105	80 - 120	0	20
Lithium	11		500	504		ug/L		99	80 - 120	1	20
Magnesium	850	J	25000	25800		ug/L		100	80 - 120	0	20
Molybdenum	11		500	512		ug/L		100	80 - 120	0	20
Potassium	890	J	25000	26900		ug/L		104	80 - 120	0	20
Selenium	ND		1000	982		ug/L		98	80 - 120	1	20
Sodium	350000		25000	364000	4	ug/L		51	80 - 120	1	20
Thallium	ND		1000	1090		ug/L		109	80 - 120	1	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-647672/1-A
Matrix: Water
Analysis Batch: 648073

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 647672

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		03/11/25 14:00	03/12/25 19:19	1

Lab Sample ID: LCS 240-647672/2-A
Matrix: Water
Analysis Batch: 648073

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 647672

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.37		ug/L		107	80 - 120

Lab Sample ID: 240-220127-1 MS
Matrix: Water
Analysis Batch: 648073

Client Sample ID: 2022-03-F-20250304-01
Prep Type: Total/NA
Prep Batch: 647672

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		1.00	0.927		ug/L		93	80 - 120

Lab Sample ID: 240-220127-1 MSD
Matrix: Water
Analysis Batch: 648073

Client Sample ID: 2022-03-F-20250304-01
Prep Type: Total/NA
Prep Batch: 647672

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		1.00	0.921		ug/L		92	80 - 120	1	20

Method: 2320 B-2021 - Alkalinity

Lab Sample ID: MB 240-647699/106
Matrix: Water
Analysis Batch: 647699

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	ND		5.0	2.6	mg/L			03/11/25 00:38	1

Method: 2320 B-2021 - Alkalinity (Continued)

Lab Sample ID: MB 240-647699/106
Matrix: Water
Analysis Batch: 647699

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/11/25 00:38	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/11/25 00:38	1

Lab Sample ID: MB 240-647699/126
Matrix: Water
Analysis Batch: 647699

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	ND		5.0	2.6	mg/L			03/11/25 02:24	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/11/25 02:24	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/11/25 02:24	1

Lab Sample ID: MB 240-647699/146
Matrix: Water
Analysis Batch: 647699

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	ND		5.0	2.6	mg/L			03/11/25 04:10	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/11/25 04:10	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/11/25 04:10	1

Lab Sample ID: LCS 240-647699/125
Matrix: Water
Analysis Batch: 647699

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	280	271		mg/L		97	86 - 123

Lab Sample ID: LCS 240-647699/145
Matrix: Water
Analysis Batch: 647699

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	280	271		mg/L		97	86 - 123

Lab Sample ID: MB 240-648233/30
Matrix: Water
Analysis Batch: 648233

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	ND		5.0	2.6	mg/L			03/13/25 17:31	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/13/25 17:31	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/13/25 17:31	1

Lab Sample ID: MB 240-648233/54
Matrix: Water
Analysis Batch: 648233

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	ND		5.0	2.6	mg/L			03/13/25 19:23	1

Method: 2320 B-2021 - Alkalinity (Continued)

Lab Sample ID: MB 240-648233/54
Matrix: Water
Analysis Batch: 648233

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/13/25 19:23	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/13/25 19:23	1

Lab Sample ID: LCS 240-648233/53
Matrix: Water
Analysis Batch: 648233

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	280	268		mg/L		96	86 - 123

Method: 2540 C-2020 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 240-647449/1
Matrix: Water
Analysis Batch: 647449

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	ND		10	7.8	mg/L			03/10/25 09:22	1

Lab Sample ID: LCS 240-647449/2
Matrix: Water
Analysis Batch: 647449

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	569	553		mg/L		97	80 - 120

Lab Sample ID: MB 240-647571/1
Matrix: Water
Analysis Batch: 647571

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	ND		10	7.8	mg/L			03/10/25 14:28	1

Lab Sample ID: LCS 240-647571/2
Matrix: Water
Analysis Batch: 647571

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	569	558		mg/L		98	80 - 120

Lab Sample ID: MB 240-647966/1
Matrix: Water
Analysis Batch: 647966

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	ND		10	7.8	mg/L			03/12/25 13:15	1

Method: 2540 C-2020 - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCS 240-647966/2
Matrix: Water
Analysis Batch: 647966

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	569	506		mg/L		89	80 - 120

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-647942/3
Matrix: Water
Analysis Batch: 647942

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.13	mg/L			03/12/25 23:10	1
Fluoride	ND		0.050	0.024	mg/L			03/12/25 23:10	1
Sulfate	ND		1.0	0.35	mg/L			03/12/25 23:10	1

Lab Sample ID: LCS 240-647942/4
Matrix: Water
Analysis Batch: 647942

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	47.0		mg/L		94	90 - 110
Fluoride	2.50	2.41		mg/L		97	90 - 110
Sulfate	50.0	46.8		mg/L		94	90 - 110

Lab Sample ID: 240-220127-8 MS
Matrix: Water
Analysis Batch: 647942

Client Sample ID: DUP-002-F-20250305-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	0.21	F1 F2	2.50	0.910	F1	mg/L		28	80 - 120
Sulfate	ND	F1	50.0	ND	F1	mg/L		0	80 - 120

Lab Sample ID: 240-220127-8 MSD
Matrix: Water
Analysis Batch: 647942

Client Sample ID: DUP-002-F-20250305-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluoride	0.21	F1 F2	2.50	0.727	F1 F2	mg/L		21	80 - 120	22	15
Sulfate	ND	F1	50.0	ND	F1	mg/L		0	80 - 120	NC	15

Lab Sample ID: MB 240-648886/3
Matrix: Water
Analysis Batch: 648886

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.13	mg/L			03/19/25 18:46	1
Fluoride	ND		0.050	0.024	mg/L			03/19/25 18:46	1
Sulfate	ND		1.0	0.35	mg/L			03/19/25 18:46	1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 240-648886/4
Matrix: Water
Analysis Batch: 648886

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	47.7		mg/L		95	90 - 110
Fluoride	2.50	2.46		mg/L		98	90 - 110
Sulfate	50.0	47.6		mg/L		95	90 - 110

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-707485/1-A
Matrix: Water
Analysis Batch: 711768

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 707485

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.2210	U	0.201	0.202	1.00	0.296	pCi/L	03/13/25 08:29	04/09/25 16:37	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.5*		*30 - 110*	*03/13/25 08:29*	*04/09/25 16:37*	*1*

Lab Sample ID: LCS 160-707485/2-A
Matrix: Water
Analysis Batch: 711768

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 707485

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226	9.58	8.492		1.20	1.00	0.318	pCi/L	89	75 - 125

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*85.9*		*30 - 110*

Lab Sample ID: 240-220127-2 DU
Matrix: Water
Analysis Batch: 711768

Client Sample ID: 9806-F-20250304-01
Prep Type: Total/NA
Prep Batch: 707485

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-226	0.0445	U	0.03315	U	0.236	1.00	0.464	pCi/L	0.03	1

Carrier	*DU %Yield*	*DU Qualifier*	*Limits*
Ba Carrier	*71.6*		*30 - 110*

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-707486/1-A
Matrix: Water
Analysis Batch: 711764

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 707486

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.2541	U	0.405	0.406	1.00	0.815	pCi/L	03/13/25 08:33	04/09/25 12:24	1

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

Lab Sample ID: MB 160-707486/1-A
Matrix: Water
Analysis Batch: 711764

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 707486

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	80.5		30 - 110	03/13/25 08:33	04/09/25 12:24	1
Y Carrier	79.6		30 - 110	03/13/25 08:33	04/09/25 12:24	1

Lab Sample ID: LCS 160-707486/2-A
Matrix: Water
Analysis Batch: 711764

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 707486

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228			9.56	11.35		1.59	1.00	0.700	pCi/L	119	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	85.9		30 - 110
Y Carrier	78.1		30 - 110

Lab Sample ID: 240-220127-2 DU
Matrix: Water
Analysis Batch: 711764

Client Sample ID: 9806-F-20250304-01
Prep Type: Total/NA
Prep Batch: 707486

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-228	0.556	U		0.8813	U G	0.681	1.00	1.06	pCi/L			0.28	1

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	71.6		30 - 110
Y Carrier	75.9		30 - 110

Metals

Prep Batch: 647670

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220127-1	2022-03-F-20250304-01	Total Recoverable	Water	3005A	
240-220127-2	9806-F-20250304-01	Total Recoverable	Water	3005A	
240-220127-3	FIELD BLANK-001-F-20250304-01	Total Recoverable	Water	3005A	
240-220127-4	EB-001-F-20250304-01	Total Recoverable	Water	3005A	
240-220127-5	93108-F-20250305-01	Total Recoverable	Water	3005A	
240-220127-6	9631-F-20250305-01	Total Recoverable	Water	3005A	
240-220127-7	MW-17-F-20250305-01	Total Recoverable	Water	3005A	
240-220127-8	DUP-002-F-20250305-01	Total Recoverable	Water	3005A	
240-220127-9	9802-F-20250306-01	Total Recoverable	Water	3005A	
MB 240-647670/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-647670/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-647670/3-A	Lab Control Sample	Total Recoverable	Water	3005A	
240-220127-1 MS	2022-03-F-20250304-01	Total Recoverable	Water	3005A	
240-220127-1 MSD	2022-03-F-20250304-01	Total Recoverable	Water	3005A	
240-220127-2 MS	9806-F-20250304-01	Total Recoverable	Water	3005A	
240-220127-2 MSD	9806-F-20250304-01	Total Recoverable	Water	3005A	

Prep Batch: 647672

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220127-1	2022-03-F-20250304-01	Total/NA	Water	7470A	
240-220127-2	9806-F-20250304-01	Total/NA	Water	7470A	
240-220127-3	FIELD BLANK-001-F-20250304-01	Total/NA	Water	7470A	
240-220127-4	EB-001-F-20250304-01	Total/NA	Water	7470A	
240-220127-5	93108-F-20250305-01	Total/NA	Water	7470A	
240-220127-6	9631-F-20250305-01	Total/NA	Water	7470A	
240-220127-7	MW-17-F-20250305-01	Total/NA	Water	7470A	
240-220127-8	DUP-002-F-20250305-01	Total/NA	Water	7470A	
240-220127-9	9802-F-20250306-01	Total/NA	Water	7470A	
MB 240-647672/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-647672/2-A	Lab Control Sample	Total/NA	Water	7470A	
240-220127-1 MS	2022-03-F-20250304-01	Total/NA	Water	7470A	
240-220127-1 MSD	2022-03-F-20250304-01	Total/NA	Water	7470A	

Analysis Batch: 648015

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220127-1	2022-03-F-20250304-01	Total Recoverable	Water	6010D	647670
240-220127-2	9806-F-20250304-01	Total Recoverable	Water	6010D	647670
240-220127-3	FIELD BLANK-001-F-20250304-01	Total Recoverable	Water	6010D	647670
240-220127-4	EB-001-F-20250304-01	Total Recoverable	Water	6010D	647670
240-220127-5	93108-F-20250305-01	Total Recoverable	Water	6010D	647670
240-220127-6	9631-F-20250305-01	Total Recoverable	Water	6010D	647670
240-220127-7	MW-17-F-20250305-01	Total Recoverable	Water	6010D	647670
240-220127-8	DUP-002-F-20250305-01	Total Recoverable	Water	6010D	647670
240-220127-9	9802-F-20250306-01	Total Recoverable	Water	6010D	647670
MB 240-647670/1-A	Method Blank	Total Recoverable	Water	6010D	647670
LCS 240-647670/2-A	Lab Control Sample	Total Recoverable	Water	6010D	647670
240-220127-1 MS	2022-03-F-20250304-01	Total Recoverable	Water	6010D	647670
240-220127-1 MSD	2022-03-F-20250304-01	Total Recoverable	Water	6010D	647670

Metals

Analysis Batch: 648073

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220127-1	2022-03-F-20250304-01	Total/NA	Water	7470A	647672
240-220127-2	9806-F-20250304-01	Total/NA	Water	7470A	647672
240-220127-3	FIELD BLANK-001-F-20250304-01	Total/NA	Water	7470A	647672
240-220127-4	EB-001-F-20250304-01	Total/NA	Water	7470A	647672
240-220127-5	93108-F-20250305-01	Total/NA	Water	7470A	647672
240-220127-6	9631-F-20250305-01	Total/NA	Water	7470A	647672
240-220127-7	MW-17-F-20250305-01	Total/NA	Water	7470A	647672
240-220127-8	DUP-002-F-20250305-01	Total/NA	Water	7470A	647672
240-220127-9	9802-F-20250306-01	Total/NA	Water	7470A	647672
MB 240-647672/1-A	Method Blank	Total/NA	Water	7470A	647672
LCS 240-647672/2-A	Lab Control Sample	Total/NA	Water	7470A	647672
240-220127-1 MS	2022-03-F-20250304-01	Total/NA	Water	7470A	647672
240-220127-1 MSD	2022-03-F-20250304-01	Total/NA	Water	7470A	647672

Analysis Batch: 648127

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220127-1	2022-03-F-20250304-01	Total Recoverable	Water	6020B	647670
240-220127-2	9806-F-20250304-01	Total Recoverable	Water	6020B	647670
240-220127-3	FIELD BLANK-001-F-20250304-01	Total Recoverable	Water	6020B	647670
240-220127-4	EB-001-F-20250304-01	Total Recoverable	Water	6020B	647670
240-220127-5	93108-F-20250305-01	Total Recoverable	Water	6020B	647670
240-220127-6	9631-F-20250305-01	Total Recoverable	Water	6020B	647670
240-220127-7	MW-17-F-20250305-01	Total Recoverable	Water	6020B	647670
240-220127-8	DUP-002-F-20250305-01	Total Recoverable	Water	6020B	647670
240-220127-9	9802-F-20250306-01	Total Recoverable	Water	6020B	647670
MB 240-647670/1-A	Method Blank	Total Recoverable	Water	6020B	647670
LCS 240-647670/3-A	Lab Control Sample	Total Recoverable	Water	6020B	647670
240-220127-2 MS	9806-F-20250304-01	Total Recoverable	Water	6020B	647670
240-220127-2 MSD	9806-F-20250304-01	Total Recoverable	Water	6020B	647670

Analysis Batch: 648380

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220127-1	2022-03-F-20250304-01	Total Recoverable	Water	6020B	647670
240-220127-5	93108-F-20250305-01	Total Recoverable	Water	6020B	647670
240-220127-6	9631-F-20250305-01	Total Recoverable	Water	6020B	647670
240-220127-7	MW-17-F-20250305-01	Total Recoverable	Water	6020B	647670
240-220127-8	DUP-002-F-20250305-01	Total Recoverable	Water	6020B	647670

General Chemistry

Analysis Batch: 647449

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220127-1	2022-03-F-20250304-01	Total/NA	Water	2540 C-2020	
240-220127-2	9806-F-20250304-01	Total/NA	Water	2540 C-2020	
240-220127-3	FIELD BLANK-001-F-20250304-01	Total/NA	Water	2540 C-2020	
240-220127-4	EB-001-F-20250304-01	Total/NA	Water	2540 C-2020	
MB 240-647449/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-647449/2	Lab Control Sample	Total/NA	Water	2540 C-2020	

General Chemistry

Analysis Batch: 647571

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220127-5	93108-F-20250305-01	Total/NA	Water	2540 C-2020	
240-220127-6	9631-F-20250305-01	Total/NA	Water	2540 C-2020	
240-220127-7	MW-17-F-20250305-01	Total/NA	Water	2540 C-2020	
240-220127-8	DUP-002-F-20250305-01	Total/NA	Water	2540 C-2020	
MB 240-647571/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-647571/2	Lab Control Sample	Total/NA	Water	2540 C-2020	

Analysis Batch: 647699

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220127-1	2022-03-F-20250304-01	Total/NA	Water	2320 B-2021	
240-220127-2	9806-F-20250304-01	Total/NA	Water	2320 B-2021	
240-220127-3	FIELD BLANK-001-F-20250304-01	Total/NA	Water	2320 B-2021	
240-220127-5	93108-F-20250305-01	Total/NA	Water	2320 B-2021	
240-220127-6	9631-F-20250305-01	Total/NA	Water	2320 B-2021	
240-220127-7	MW-17-F-20250305-01	Total/NA	Water	2320 B-2021	
240-220127-8	DUP-002-F-20250305-01	Total/NA	Water	2320 B-2021	
240-220127-9	9802-F-20250306-01	Total/NA	Water	2320 B-2021	
MB 240-647699/106	Method Blank	Total/NA	Water	2320 B-2021	
MB 240-647699/126	Method Blank	Total/NA	Water	2320 B-2021	
MB 240-647699/146	Method Blank	Total/NA	Water	2320 B-2021	
LCS 240-647699/125	Lab Control Sample	Total/NA	Water	2320 B-2021	
LCS 240-647699/145	Lab Control Sample	Total/NA	Water	2320 B-2021	

Analysis Batch: 647942

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220127-1	2022-03-F-20250304-01	Total/NA	Water	300.0	
240-220127-2	9806-F-20250304-01	Total/NA	Water	300.0	
240-220127-2	9806-F-20250304-01	Total/NA	Water	300.0	
240-220127-3	FIELD BLANK-001-F-20250304-01	Total/NA	Water	300.0	
240-220127-4	EB-001-F-20250304-01	Total/NA	Water	300.0	
240-220127-5	93108-F-20250305-01	Total/NA	Water	300.0	
240-220127-5	93108-F-20250305-01	Total/NA	Water	300.0	
240-220127-6	9631-F-20250305-01	Total/NA	Water	300.0	
240-220127-6	9631-F-20250305-01	Total/NA	Water	300.0	
240-220127-7	MW-17-F-20250305-01	Total/NA	Water	300.0	
240-220127-8	DUP-002-F-20250305-01	Total/NA	Water	300.0	
240-220127-9	9802-F-20250306-01	Total/NA	Water	300.0	
MB 240-647942/3	Method Blank	Total/NA	Water	300.0	
LCS 240-647942/4	Lab Control Sample	Total/NA	Water	300.0	
240-220127-8 MS	DUP-002-F-20250305-01	Total/NA	Water	300.0	
240-220127-8 MSD	DUP-002-F-20250305-01	Total/NA	Water	300.0	

Analysis Batch: 647966

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220127-9	9802-F-20250306-01	Total/NA	Water	2540 C-2020	
MB 240-647966/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-647966/2	Lab Control Sample	Total/NA	Water	2540 C-2020	

Analysis Batch: 648233

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220127-4	EB-001-F-20250304-01	Total/NA	Water	2320 B-2021	

General Chemistry (Continued)

Analysis Batch: 648233 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-648233/30	Method Blank	Total/NA	Water	2320 B-2021	
MB 240-648233/54	Method Blank	Total/NA	Water	2320 B-2021	
LCS 240-648233/53	Lab Control Sample	Total/NA	Water	2320 B-2021	

Analysis Batch: 648886

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220127-7	MW-17-F-20250305-01	Total/NA	Water	300.0	
240-220127-8	DUP-002-F-20250305-01	Total/NA	Water	300.0	
MB 240-648886/3	Method Blank	Total/NA	Water	300.0	
LCS 240-648886/4	Lab Control Sample	Total/NA	Water	300.0	

Rad

Prep Batch: 707485

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220127-1	2022-03-F-20250304-01	Total/NA	Water	PrecSep-21	
240-220127-2	9806-F-20250304-01	Total/NA	Water	PrecSep-21	
240-220127-3	FIELD BLANK-001-F-20250304-01	Total/NA	Water	PrecSep-21	
240-220127-4	EB-001-F-20250304-01	Total/NA	Water	PrecSep-21	
240-220127-5	93108-F-20250305-01	Total/NA	Water	PrecSep-21	
240-220127-6	9631-F-20250305-01	Total/NA	Water	PrecSep-21	
240-220127-7	MW-17-F-20250305-01	Total/NA	Water	PrecSep-21	
240-220127-8	DUP-002-F-20250305-01	Total/NA	Water	PrecSep-21	
240-220127-9	9802-F-20250306-01	Total/NA	Water	PrecSep-21	
MB 160-707485/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-707485/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
240-220127-2 DU	9806-F-20250304-01	Total/NA	Water	PrecSep-21	

Prep Batch: 707486

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220127-1	2022-03-F-20250304-01	Total/NA	Water	PrecSep_0	
240-220127-2	9806-F-20250304-01	Total/NA	Water	PrecSep_0	
240-220127-3	FIELD BLANK-001-F-20250304-01	Total/NA	Water	PrecSep_0	
240-220127-4	EB-001-F-20250304-01	Total/NA	Water	PrecSep_0	
240-220127-5	93108-F-20250305-01	Total/NA	Water	PrecSep_0	
240-220127-6	9631-F-20250305-01	Total/NA	Water	PrecSep_0	
240-220127-7	MW-17-F-20250305-01	Total/NA	Water	PrecSep_0	
240-220127-8	DUP-002-F-20250305-01	Total/NA	Water	PrecSep_0	
240-220127-9	9802-F-20250306-01	Total/NA	Water	PrecSep_0	
MB 160-707486/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-707486/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
240-220127-2 DU	9806-F-20250304-01	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-220127-1

Client Sample ID: 2022-03-F-20250304-01

Lab Sample ID: 240-220127-1

Date Collected: 03/04/25 10:39

Matrix: Water

Date Received: 03/08/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			647670	XWS6	EET CLE	03/11/25 14:00
Total Recoverable	Analysis	6010D		1	648015	KLC	EET CLE	03/12/25 15:43
Total Recoverable	Prep	3005A			647670	XWS6	EET CLE	03/11/25 14:00
Total Recoverable	Analysis	6020B		1	648127	RKT	EET CLE	03/13/25 16:19
Total Recoverable	Prep	3005A			647670	XWS6	EET CLE	03/11/25 14:00
Total Recoverable	Analysis	6020B		20	648380	RKT	EET CLE	03/14/25 16:38
Total/NA	Prep	7470A			647672	XWS6	EET CLE	03/11/25 14:00
Total/NA	Analysis	7470A		1	648073	GEV	EET CLE	03/12/25 19:22
Total/NA	Analysis	2320 B-2021		1	647699	PQD2	EET CLE	03/11/25 03:36
Total/NA	Analysis	2540 C-2020		1	647449	C5SV	EET CLE	03/10/25 09:22
Total/NA	Analysis	300.0		100	647942	JMR	EET CLE	03/13/25 00:14
Total/NA	Prep	PrecSep-21			707485	OGC	EET SL	03/13/25 08:29
Total/NA	Analysis	9315		1	711768	MLK	EET SL	04/09/25 16:37
Total/NA	Prep	PrecSep_0			707486	OGC	EET SL	03/13/25 08:33
Total/NA	Analysis	9320		1	711764	MLK	EET SL	04/09/25 12:22
Total/NA	Analysis	Ra226_Ra228		1	711918	FLC	EET SL	04/10/25 12:33

Client Sample ID: 9806-F-20250304-01

Lab Sample ID: 240-220127-2

Date Collected: 03/04/25 14:30

Matrix: Water

Date Received: 03/08/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			647670	XWS6	EET CLE	03/11/25 14:00
Total Recoverable	Analysis	6010D		1	648015	KLC	EET CLE	03/12/25 16:13
Total Recoverable	Prep	3005A			647670	XWS6	EET CLE	03/11/25 14:00
Total Recoverable	Analysis	6020B		1	648127	RKT	EET CLE	03/13/25 16:36
Total/NA	Prep	7470A			647672	XWS6	EET CLE	03/11/25 14:00
Total/NA	Analysis	7470A		1	648073	GEV	EET CLE	03/12/25 19:28
Total/NA	Analysis	2320 B-2021		1	647699	PQD2	EET CLE	03/11/25 03:42
Total/NA	Analysis	2540 C-2020		1	647449	C5SV	EET CLE	03/10/25 09:22
Total/NA	Analysis	300.0		1	647942	JMR	EET CLE	03/13/25 00:32
Total/NA	Analysis	300.0		10	647942	JMR	EET CLE	03/13/25 01:00
Total/NA	Prep	PrecSep-21			707485	OGC	EET SL	03/13/25 08:29
Total/NA	Analysis	9315		1	711768	MLK	EET SL	04/09/25 16:37
Total/NA	Prep	PrecSep_0			707486	OGC	EET SL	03/13/25 08:33
Total/NA	Analysis	9320		1	711764	MLK	EET SL	04/09/25 12:07
Total/NA	Analysis	Ra226_Ra228		1	711918	FLC	EET SL	04/10/25 12:33

Client Sample ID: FIELD BLANK-001-F-20250304-01
Lab Sample ID: 240-220127-3

Date Collected: 03/04/25 15:15
Matrix: Water
Date Received: 03/08/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			647670	XWS6	EET CLE	03/11/25 14:00
Total Recoverable	Analysis	6010D		1	648015	KLC	EET CLE	03/12/25 16:48
Total Recoverable	Prep	3005A			647670	XWS6	EET CLE	03/11/25 14:00
Total Recoverable	Analysis	6020B		1	648127	RKT	EET CLE	03/13/25 17:15
Total/NA	Prep	7470A			647672	XWS6	EET CLE	03/11/25 14:00
Total/NA	Analysis	7470A		1	648073	GEV	EET CLE	03/12/25 19:45
Total/NA	Analysis	2320 B-2021		1	647699	PQD2	EET CLE	03/11/25 03:48
Total/NA	Analysis	2540 C-2020		1	647449	C5SV	EET CLE	03/10/25 09:22
Total/NA	Analysis	300.0		1	647942	JMR	EET CLE	03/13/25 01:09
Total/NA	Prep	PrecSep-21			707485	OGC	EET SL	03/13/25 08:29
Total/NA	Analysis	9315		1	711768	MLK	EET SL	04/09/25 16:37
Total/NA	Prep	PrecSep_0			707486	OGC	EET SL	03/13/25 08:33
Total/NA	Analysis	9320		1	711764	MLK	EET SL	04/09/25 12:24
Total/NA	Analysis	Ra226_Ra228		1	711918	FLC	EET SL	04/10/25 12:33

Client Sample ID: EB-001-F-20250304-01
Lab Sample ID: 240-220127-4

Date Collected: 03/04/25 15:20
Matrix: Water
Date Received: 03/08/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			647670	XWS6	EET CLE	03/11/25 14:00
Total Recoverable	Analysis	6010D		1	648015	KLC	EET CLE	03/12/25 16:52
Total Recoverable	Prep	3005A			647670	XWS6	EET CLE	03/11/25 14:00
Total Recoverable	Analysis	6020B		1	648127	RKT	EET CLE	03/13/25 17:18
Total/NA	Prep	7470A			647672	XWS6	EET CLE	03/11/25 14:00
Total/NA	Analysis	7470A		1	648073	GEV	EET CLE	03/12/25 19:47
Total/NA	Analysis	2320 B-2021		1	648233	PQD2	EET CLE	03/13/25 20:50
Total/NA	Analysis	2540 C-2020		1	647449	C5SV	EET CLE	03/10/25 09:22
Total/NA	Analysis	300.0		1	647942	JMR	EET CLE	03/13/25 01:18
Total/NA	Prep	PrecSep-21			707485	OGC	EET SL	03/13/25 08:29
Total/NA	Analysis	9315		1	711768	MLK	EET SL	04/09/25 16:37
Total/NA	Prep	PrecSep_0			707486	OGC	EET SL	03/13/25 08:33
Total/NA	Analysis	9320		1	711764	MLK	EET SL	04/09/25 12:25
Total/NA	Analysis	Ra226_Ra228		1	711918	FLC	EET SL	04/10/25 12:33

Client Sample ID: 93108-F-20250305-01
Lab Sample ID: 240-220127-5

Date Collected: 03/05/25 10:35
Matrix: Water
Date Received: 03/08/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			647670	XWS6	EET CLE	03/11/25 14:00
Total Recoverable	Analysis	6010D		1	648015	KLC	EET CLE	03/12/25 17:05
Total Recoverable	Prep	3005A			647670	XWS6	EET CLE	03/11/25 14:00
Total Recoverable	Analysis	6020B		1	648127	RKT	EET CLE	03/13/25 17:21

Client Sample ID: 93108-F-20250305-01
Lab Sample ID: 240-220127-5

Date Collected: 03/05/25 10:35
Matrix: Water
Date Received: 03/08/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			647670	XWS6	EET CLE	03/11/25 14:00
Total Recoverable	Analysis	6020B		5	648380	RKT	EET CLE	03/14/25 16:41
Total/NA	Prep	7470A			647672	XWS6	EET CLE	03/11/25 14:00
Total/NA	Analysis	7470A		1	648073	GEV	EET CLE	03/12/25 19:48
Total/NA	Analysis	2320 B-2021		1	647699	PQD2	EET CLE	03/11/25 04:14
Total/NA	Analysis	2540 C-2020		1	647571	C5SV	EET CLE	03/10/25 14:28
Total/NA	Analysis	300.0		5	647942	JMR	EET CLE	03/13/25 01:27
Total/NA	Analysis	300.0		20	647942	JMR	EET CLE	03/13/25 01:36
Total/NA	Prep	PrecSep-21			707485	OGC	EET SL	03/13/25 08:29
Total/NA	Analysis	9315		1	711768	MLK	EET SL	04/09/25 16:37
Total/NA	Prep	PrecSep_0			707486	OGC	EET SL	03/13/25 08:33
Total/NA	Analysis	9320		1	711764	MLK	EET SL	04/09/25 12:24
Total/NA	Analysis	Ra226_Ra228		1	711918	FLC	EET SL	04/10/25 12:33

Client Sample ID: 9631-F-20250305-01
Lab Sample ID: 240-220127-6

Date Collected: 03/05/25 12:01
Matrix: Water
Date Received: 03/08/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			647670	XWS6	EET CLE	03/11/25 14:00
Total Recoverable	Analysis	6010D		1	648015	KLC	EET CLE	03/12/25 17:09
Total Recoverable	Prep	3005A			647670	XWS6	EET CLE	03/11/25 14:00
Total Recoverable	Analysis	6020B		1	648127	RKT	EET CLE	03/13/25 17:24
Total Recoverable	Prep	3005A			647670	XWS6	EET CLE	03/11/25 14:00
Total Recoverable	Analysis	6020B		20	648380	RKT	EET CLE	03/14/25 16:43
Total/NA	Prep	7470A			647672	XWS6	EET CLE	03/11/25 14:00
Total/NA	Analysis	7470A		1	648073	GEV	EET CLE	03/12/25 19:50
Total/NA	Analysis	2320 B-2021		1	647699	PQD2	EET CLE	03/11/25 04:20
Total/NA	Analysis	2540 C-2020		1	647571	C5SV	EET CLE	03/10/25 14:28
Total/NA	Analysis	300.0		100	647942	JMR	EET CLE	03/13/25 01:45
Total/NA	Analysis	300.0		1000	647942	JMR	EET CLE	03/13/25 01:55
Total/NA	Prep	PrecSep-21			707485	OGC	EET SL	03/13/25 08:29
Total/NA	Analysis	9315		1	711768	MLK	EET SL	04/09/25 16:37
Total/NA	Prep	PrecSep_0			707486	OGC	EET SL	03/13/25 08:33
Total/NA	Analysis	9320		1	711764	MLK	EET SL	04/09/25 12:24
Total/NA	Analysis	Ra226_Ra228		1	711918	FLC	EET SL	04/10/25 12:33

Client Sample ID: MW-17-F-20250305-01
Lab Sample ID: 240-220127-7

Date Collected: 03/05/25 14:10
Matrix: Water
Date Received: 03/08/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			647670	XWS6	EET CLE	03/11/25 14:00
Total Recoverable	Analysis	6010D		1	648015	KLC	EET CLE	03/12/25 17:14

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-220127-1

Client Sample ID: MW-17-F-20250305-01

Lab Sample ID: 240-220127-7

Date Collected: 03/05/25 14:10
Matrix: Water
Date Received: 03/08/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			647670	XWS6	EET CLE	03/11/25 14:00
Total Recoverable	Analysis	6020B		1	648127	RKT	EET CLE	03/13/25 17:27
Total Recoverable	Prep	3005A			647670	XWS6	EET CLE	03/11/25 14:00
Total Recoverable	Analysis	6020B		10	648380	RKT	EET CLE	03/14/25 16:46
Total/NA	Prep	7470A			647672	XWS6	EET CLE	03/11/25 14:00
Total/NA	Analysis	7470A		1	648073	GEV	EET CLE	03/12/25 19:55
Total/NA	Analysis	2320 B-2021		1	647699	PQD2	EET CLE	03/11/25 04:25
Total/NA	Analysis	2540 C-2020		1	647571	C5SV	EET CLE	03/10/25 14:28
Total/NA	Analysis	300.0		1	647942	JMR	EET CLE	03/13/25 02:04
Total/NA	Analysis	300.0		50	648886	JMR	EET CLE	03/19/25 19:59
Total/NA	Prep	PrecSep-21			707485	OGC	EET SL	03/13/25 08:29
Total/NA	Analysis	9315		1	711772	MLK	EET SL	04/09/25 16:28
Total/NA	Prep	PrecSep_0			707486	OGC	EET SL	03/13/25 08:33
Total/NA	Analysis	9320		1	711743	MLK	EET SL	04/09/25 12:25
Total/NA	Analysis	Ra226_Ra228		1	711918	FLC	EET SL	04/10/25 12:33

Client Sample ID: DUP-002-F-20250305-01

Lab Sample ID: 240-220127-8

Date Collected: 03/05/25 00:00
Matrix: Water
Date Received: 03/08/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			647670	XWS6	EET CLE	03/11/25 14:00
Total Recoverable	Analysis	6010D		1	648015	KLC	EET CLE	03/12/25 17:18
Total Recoverable	Prep	3005A			647670	XWS6	EET CLE	03/11/25 14:00
Total Recoverable	Analysis	6020B		1	648127	RKT	EET CLE	03/13/25 17:30
Total Recoverable	Prep	3005A			647670	XWS6	EET CLE	03/11/25 14:00
Total Recoverable	Analysis	6020B		10	648380	RKT	EET CLE	03/14/25 16:49
Total/NA	Prep	7470A			647672	XWS6	EET CLE	03/11/25 14:00
Total/NA	Analysis	7470A		1	648073	GEV	EET CLE	03/12/25 19:57
Total/NA	Analysis	2320 B-2021		1	647699	PQD2	EET CLE	03/11/25 04:34
Total/NA	Analysis	2540 C-2020		1	647571	C5SV	EET CLE	03/10/25 14:28
Total/NA	Analysis	300.0		1	647942	JMR	EET CLE	03/13/25 02:13
Total/NA	Analysis	300.0		50	648886	JMR	EET CLE	03/19/25 20:08
Total/NA	Prep	PrecSep-21			707485	OGC	EET SL	03/13/25 08:29
Total/NA	Analysis	9315		1	711772	MLK	EET SL	04/09/25 16:28
Total/NA	Prep	PrecSep_0			707486	OGC	EET SL	03/13/25 08:33
Total/NA	Analysis	9320		1	711743	MLK	EET SL	04/09/25 12:25
Total/NA	Analysis	Ra226_Ra228		1	711918	FLC	EET SL	04/10/25 12:33

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-220127-1
Project/Site: Federal CCR Wells

Client Sample ID: 9802-F-20250306-01
Lab Sample ID: 240-220127-9

Date Collected: 03/06/25 15:08
Matrix: Water
Date Received: 03/08/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			647670	XWS6	EET CLE	03/11/25 14:00
Total Recoverable	Analysis	6010D		1	648015	KLC	EET CLE	03/12/25 17:22
Total Recoverable	Prep	3005A			647670	XWS6	EET CLE	03/11/25 14:00
Total Recoverable	Analysis	6020B		1	648127	RKT	EET CLE	03/13/25 17:33
Total/NA	Prep	7470A			647672	XWS6	EET CLE	03/11/25 14:00
Total/NA	Analysis	7470A		1	648073	GEV	EET CLE	03/12/25 19:59
Total/NA	Analysis	2320 B-2021		1	647699	PQD2	EET CLE	03/11/25 04:42
Total/NA	Analysis	2540 C-2020		1	647966	TAV2	EET CLE	03/12/25 13:15
Total/NA	Analysis	300.0		1	647942	JMR	EET CLE	03/13/25 02:59
Total/NA	Prep	PrecSep-21			707485	OGC	EET SL	03/13/25 08:29
Total/NA	Analysis	9315		1	711772	MLK	EET SL	04/09/25 16:28
Total/NA	Prep	PrecSep_0			707486	OGC	EET SL	03/13/25 08:33
Total/NA	Analysis	9320		1	711743	MLK	EET SL	04/09/25 12:25
Total/NA	Analysis	Ra226_Ra228		1	711918	FLC	EET SL	04/10/25 12:33

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

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

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-220127-1
Project/Site: Federal CCR Wells

Laboratory: Eurofins Cleveland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0806	12-31-26
Georgia	State	4062	02-27-26
Illinois	NELAP	200004	08-31-25
Iowa	State	421	06-01-25
Kansas	NELAP	E-10336	01-31-26
Kentucky (UST)	State	112225	02-28-26
Kentucky (WW)	State	KY98016	12-31-25
Minnesota	NELAP	039-999-348	12-31-25
New Hampshire	NELAP	225024	09-30-25
New Jersey	NELAP	OH001	07-03-25
New York	NELAP	10975	03-31-25
Ohio	State	8303	11-04-25
Ohio VAP	State	ORELAP 4062	02-28-26
Oregon	NELAP	4062	02-27-26
Pennsylvania	NELAP	68-00340	08-31-25
Texas	NELAP	T104704517-22-19	08-31-25
US Fish & Wildlife	US Federal Programs	A26406	02-28-26
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	09-14-25
West Virginia DEP	State	210	12-31-25
Wisconsin	State	399167560	08-31-25

Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-25
ANAB	Dept. of Defense ELAP	L2305	04-06-27
ANAB	Dept. of Energy	L2305.01	04-06-27
Arizona	State	AZ0813	12-08-25
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-25
Connecticut	State	PH-0241	03-31-25 *
Florida	NELAP	E87689	06-30-25
HI - RadChem Recognition	State	n/a	06-30-25
Illinois	NELAP	200023	11-30-25
Iowa	State	373	12-01-26
Kansas	NELAP	E-10236	10-31-25
Kentucky (DW)	State	KY90125	12-31-25
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-25
Louisiana (All)	NELAP	106151	06-30-25
Louisiana (DW)	State	LA011	12-31-25
Maryland	State	310	09-30-25
Massachusetts	State	M-MO054	06-30-25
MI - RadChem Recognition	State	9005	06-30-25
Missouri	State	780	06-30-25
Nevada	State	MO00054	07-31-25
New Jersey	NELAP	MO002	06-30-25
New Mexico	State	MO00054	06-30-25

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-220127-1
Project/Site: Federal CCR Wells

Laboratory: Eurofins St. Louis (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
North Carolina (DW)	State	29700	07-31-25
North Dakota	State	R-207	06-30-25
Oklahoma	NELAP	9997	08-31-25
Oregon	NELAP	4157	09-01-25
Pennsylvania	NELAP	68-00540	02-28-26
South Carolina	State	85002	06-30-25
Texas	NELAP	T104704193	07-31-25
US Fish & Wildlife	US Federal Programs	058448	07-31-25
USDA	US Federal Programs	525-23-138-94730	05-18-26
Utah	NELAP	MO00054	07-31-25
Virginia	NELAP	460230	06-14-25
Washington	State	C592	08-30-25
West Virginia DEP	State	381	10-31-25

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins Environment Testing

Client Information	Sampler: Bobby Casto	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s):	COC No. 240-111832-39818.1
Client Contact: Taylor Huffman	Phone: 740-373-4308	E-Mail: roxanne.cisneros@et.eurofinsus.com	State of Origin:	Page: Page 1 of 8
Company: Lightstone Generation Gavin Power LLC	PWSID			Job #:
Address: 7397 OH-7	Due Date Requested:			
City: Cheshire	TAT Requested (days):			
State, Zip: OH, 45620	Compliance Project: Δ Yes Δ No			
Phone: 740-925-3171(Tel)	PO #: 2935505			
Email: taylor.huffman@lightstonegen.com	WO #:			
Project Name: Gavin CCR	Project #: 24019633			
Site: Gavin	SSOW#:			

Analysis Requested

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=wastewater, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B, 6020, 7470A	2540C_Calcd - TDS	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	300.0_28D - Chloride, Fluoride & Sulfate	2320B - (MOD) Alkalinity	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	N	D	N	N		
2022-03-F-20250304-01	3-4-25	1039	G	Water			1	1	2	1	1		
9806-F-20250304-01	3-4-25	1430	G	Water			1	1	2	1	1		
Field Blank-001-F-20250304-01	3-4-25	1515	G	Water			1	1	2	1	1		
EB-001-F-20250304-01	3-4-25	1520	G	Water			1	1	2	1	1		
93108-F-20250305-01	3-5-25	1035	G	Water			1	1	2	1	1		
9631-F-20250305-01	3-5-25	1201	G	Water			1	1	2	1	1		
MW-17-F-20250305-01	3-5-25	1410	G	Water			1	1	2	1	1		
DUP-002-F-20250305-01	3-5-25	—	G	Water			1	1	2	1	1		
9802-F-20250306-01	3-6-25	1508	G	Water			1	1	2	1	1		
				Water									
				Water									

240-220127 COC

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	[signature]	3-7-25 0930	KLMRA	Ashley Deal	3.7.25 1140	ETA
2	Ashley Deal	3.7.25 1700	ETA	[signature] Martin	3/8/25 800	ETA
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 06/08/2021

Eurofins – Cleveland Sample Receipt Form/Narrative **Login # :** _____
Barberton Facility

Client Gawin Site Name _____ Cooler unpacked by: IMartin

Cooler Received on 3/8/25 Opened on 3/8/25

FedEx: 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other _____

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

Eurofins Cooler # EC 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 # 21 (CF +1.1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	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# HC448976
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 # _____

Eurofins - Cleveland Sample Receipt Multiple Cooler Form

Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
(EC) Client Box Other	IR GUN #: 21	3.6	4.7	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #:	0.4	1.5	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #:	2.4	3.5	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #:	1.4	2.5	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #:	2.3	3.4	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #:	2.3	3.4	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #:	2.3	3.4	Wet Ice Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #:	2.4	3.5	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None

☐ See Temperature Excursion Form

3/8/2025

Login Container Summary Report

240-220127

4/10/2025

Temperature readings _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
2022-03-F-20250304-01	240-220127-A-1	Plastic 60 mL - unpreserved				
2022-03-F-20250304-01	240-220127-B-1	Plastic 60 mL - unpreserved				
2022-03-F-20250304-01	240-220127-C-1	Plastic 500ml - unpreserved				
2022-03-F-20250304-01	240-220127-D-1	Plastic 500ml - with Nitric Acid	<2			
2022-03-F-20250304-01	240-220127-E-1	Plastic 1 liter - Nitric Acid	<2			
2022-03-F-20250304-01	240-220127-F-1	Plastic 1 liter - Nitric Acid	<2			
9806-F-20250304-01	240-220127-A-2	Plastic 60 mL - unpreserved				
9806-F-20250304-01	240-220127-B-2	Plastic 60 mL - unpreserved				
9806-F-20250304-01	240-220127-C-2	Plastic 500ml - unpreserved				
9806-F-20250304-01	240-220127-D-2	Plastic 500ml - with Nitric Acid	<2			
9806-F-20250304-01	240-220127-E-2	Plastic 1 liter - Nitric Acid	<2			
9806-F-20250304-01	240-220127-F-2	Plastic 1 liter - Nitric Acid	<2			
FIELD BLANK-001-F-20250304-01	240-220127-A-3	Plastic 60 mL - unpreserved				
FIELD BLANK-001-F-20250304-01	240-220127-B-3	Plastic 60 mL - unpreserved				
FIELD BLANK-001-F-20250304-01	240-220127-C-3	Plastic 500ml - unpreserved				
FIELD BLANK-001-F-20250304-01	240-220127-D-3	Plastic 500ml - with Nitric Acid	<2			
FIELD BLANK-001-F-20250304-01	240-220127-E-3	Plastic 1 liter - Nitric Acid	<2			
FIELD BLANK-001-F-20250304-01	240-220127-F-3	Plastic 1 liter - Nitric Acid	<2			
EB-001-F-20250304-01	240-220127-A-4	Plastic 60 mL - unpreserved				
EB-001-F-20250304-01	240-220127-B-4	Plastic 60 mL - unpreserved				
EB-001-F-20250304-01	240-220127-C-4	Plastic 500ml - unpreserved				
EB-001-F-20250304-01	240-220127-D-4	Plastic 500ml - with Nitric Acid	<2			
EB-001-F-20250304-01	240-220127-E-4	Plastic 1 liter - Nitric Acid	<2			
EB-001-F-20250304-01	240-220127-F-4	Plastic 1 liter - Nitric Acid	<2			
93108-F 20250305-01	240-220127-A-5	Plastic 60 mL - unpreserved				
93108-F-20250305-01	240-220127-B-5	Plastic 60 mL - unpreserved				
93108-F-20250305-01	240-220127-C-5	Plastic 500ml - unpreserved				
93108-F-20250305-01	240-220127-D-5	Plastic 500ml - with Nitric Acid	<2			
93108-F-20250305-01	240-220127-E-5	Plastic 1 liter - Nitric Acid	<2			
93108-F-20250305-01	240-220127-F-5	Plastic 1 liter - Nitric Acid	<2			
9631-F-20250305-01	240-220127-A-6	Plastic 60 mL - unpreserved				
9631-F-20250305-01	240-220127-B-6	Plastic 60 mL - unpreserved				

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
9631-F-20250305-01	240-220127-C-6	Plastic 500ml - unpreserved				
9631-F-20250305-01	240-220127-D-6	Plastic 500ml - with Nitric Acid	<2			
9631-F-20250305-01	240-220127-E-6	Plastic 1 liter - Nitric Acid	<2			
9631-F-20250305-01	240-220127-F-6	Plastic 1 liter - Nitric Acid	<2			
MW-17-F-20250305-01	240-220127-A-7	Plastic 60 mL - unpreserved				
MW-17-F-20250305-01	240-220127-B-7	Plastic 60 mL - unpreserved				
MW-17-F-20250305-01	240-220127-C-7	Plastic 500ml - unpreserved				
MW-17-F-20250305-01	240-220127-D-7	Plastic 500ml - with Nitric Acid	<2			
MW-17-F-20250305-01	240-220127-E-7	Plastic 1 liter - Nitric Acid	<2			
MW-17-F-20250305-01	240-220127-F-7	Plastic 1 liter - Nitric Acid	<2			
DUP-002-F-20250305-01	240-220127-A-8	Plastic 60 mL - unpreserved				
DUP-002-F-20250305-01	240-220127-B-8	Plastic 60 mL - unpreserved				
DUP-002-F-20250305-01	240-220127-C-8	Plastic 500ml - unpreserved				
DUP-002-F-20250305-01	240-220127-D-8	Plastic 500ml - with Nitric Acid	<2			
DUP-002-F-20250305-01	240-220127-E-8	Plastic 1 liter - Nitric Acid	<2			
DUP-002-F-20250305-01	240-220127-F-8	Plastic 1 liter - Nitric Acid	<2			
9802-F-20250306-01	240-220127-A-9	Plastic 60 mL - unpreserved				
9802-F-20250306-01	240-220127-B-9	Plastic 60 mL - unpreserved				
9802-F-20250306-01	240-220127-C-9	Plastic 500ml - unpreserved				
9802-F-20250306-01	240-220127-D-9	Plastic 500ml - with Nitric Acid	<2			
9802-F-20250306-01	240-220127-E-9	Plastic 1 liter - Nitric Acid	<2			
9802-F-20250306-01	240-220127 F-9	Plastic 1 liter - Nitric Acid	<2			

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s): N/A	COC No: 240-199564.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: roxanne.cisneros@et.eurofinsus.com	State of Origin: Ohio	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): N/A		Job #: 240-220127-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 3/24/2025			Preservation Codes: -
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Federal GWM Wells	Project #: 24019633			
Site: N/A	SSOW#: N/A			Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9320_Ra228/PrecSep_0 Radium-228 (GFPC)	9315_Ra226/PrecSep_21 Radium-226 (GFPC)	Ra226Ra228_GFPC/ Combined Radium-226 and Radium-228	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
2022-03-F-20250304-01 (240-220127-1)	3/4/25	10:39 Eastern	G	Water			X	X	X	2	
9806-F-20250304-01 (240-220127-2)	3/4/25	14:30 Eastern	G	Water			X	X	X	2	
FIELD BLANK-001-F-20250304-01 (240-220127-3)	3/4/25	15:15 Eastern	G	Water			X	X	X	2	
EB-001-F-20250304-01 (240-220127-4)	3/4/25	15:20 Eastern	G	Water			X	X	X	2	
93108-F-20250305-01 (240-220127-5)	3/5/25	10:35 Eastern	G	Water			X	X	X	2	
9631-F-20250305-01 (240-220127-6)	3/5/25	12:01 Eastern	G	Water			X	X	X	2	
MW-17-F-20250305-01 (240-220127-7)	3/5/25	14:10 Eastern	G	Water			X	X	X	2	
DUP-002-F-20250305-01 (240-220127-8)	3/5/25	Eastern	G	Water			X	X	X	2	
9802-F-20250306-01 (240-220127-9)	3/6/25	15:08 Eastern	G	Water			X	X	X	2	

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

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

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:			
Relinquished by:	Date/Time: 3/10/25 0800	Company EC	Received by: M. Pinette	Date/Time: MAR 1 1 2025 0825	Company
Relinquished by:	Date/Time:	Company	Received by: Meadow Pinette	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: 10/10/2024

4/10/2025

Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-220127-1

Login Number: 220127
List Number: 2
Creator: Pinette, Meadow L

List Source: Eurofins St. Louis
List Creation: 03/11/25 10:59 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.	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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620
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JOB DESCRIPTION

Federal CCR Wells

JOB NUMBER

240-220237-1

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization

Roxanne Cisneros

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Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(330)497-9396

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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.
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.

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: 240-220237-1 — Eurofins Cleveland

Job Narrative
240-220237-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 3/12/2025 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.7°C.

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

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

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

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

Method Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-220237-1

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CLE
6020B	Metals (ICP/MS)	SW846	EET CLE
7470A	Mercury (CVAA)	SW846	EET CLE
2320 B-2021	Alkalinity	SM	EET CLE
2540 C-2020	Solids, Total Dissolved (TDS)	SM	EET CLE
300.0	Anions, Ion Chromatography	EPA	EET CLE
9315	Radium 226 by GFPC	SW846	EET SL
9320	Radium-228 (GFPC)	SW846	EET SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	EET SL
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CLE
7470A	Preparation, Mercury	SW846	EET CLE
PrecSep_0	Preparation, Precipitate Separation	None	EET SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	EET SL

Protocol References:

EPA = US Environmental Protection Agency

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:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

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

Sample Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-220237-1
Project/Site: Federal CCR Wells

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-220237-1	94137-F-20250307-01	Water	03/07/25 10:48	03/12/25 08:00
240-220237-2	94136-F-20250307-01	Water	03/07/25 11:52	03/12/25 08:00
240-220237-3	2000-F-20250307-01	Water	03/07/25 14:56	03/12/25 08:00

Detection Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-220237-1

Client Sample ID: 94137-F-20250307-01 — Lab Sample ID: 240-220237-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.6	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	45		5.0	0.77	ug/L	1		6020B	Total Recoverable
Cadmium	0.097	J	1.0	0.077	ug/L	1		6020B	Total Recoverable
Calcium	150000		1000	250	ug/L	1		6020B	Total Recoverable
Chromium	4.6	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	160		1.0	0.086	ug/L	1		6020B	Total Recoverable
Lithium	8.7		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	48000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	2.7	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	1800		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	63000		1000	880	ug/L	1		6020B	Total Recoverable
Total Alkalinity	350		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	350		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	900		10	7.8	mg/L	1		2540 C-2020	Total/NA
Chloride	27		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.12		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	320		5.0	1.7	mg/L	5		300.0	Total/NA

Client Sample ID: 94136-F-20250307-01 — Lab Sample ID: 240-220237-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	390		100	57	ug/L	1		6010D	Total Recoverable
Antimony	0.82	J	2.0	0.57	ug/L	1		6020B	Total Recoverable
Barium	110		5.0	0.77	ug/L	1		6020B	Total Recoverable
Cadmium	0.12	J	1.0	0.077	ug/L	1		6020B	Total Recoverable
Calcium	12000		1000	250	ug/L	1		6020B	Total Recoverable
Chromium	19		5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	0.53	J	1.0	0.086	ug/L	1		6020B	Total Recoverable
Lithium	25		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	3400		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	17		5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	2000		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	760000		1000	880	ug/L	1		6020B	Total Recoverable
Total Alkalinity	350		5.0	2.6	mg/L	1		2320 B-2021	Total/NA

This Detection Summary does not include radiochemical test results.

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Client Sample ID: 94136-F-20250307-01 (Continued)
Lab Sample ID: 240-220237-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bicarbonate Alkalinity as CaCO3	330		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Carbonate Alkalinity as CaCO3	17		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	1900		40	31	mg/L	1		2540 C-2020	Total/NA
Chloride	840		10	1.3	mg/L	10		300.0	Total/NA
Fluoride	1.6		0.10	0.048	mg/L	2		300.0	Total/NA
Sulfate	58		2.0	0.70	mg/L	2		300.0	Total/NA

Client Sample ID: 2000-F-20250307-01
Lab Sample ID: 240-220237-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	330		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	2.0	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	33		5.0	0.77	ug/L	1		6020B	Total Recoverable
Calcium	2600		1000	250	ug/L	1		6020B	Total Recoverable
Chromium	9.9		5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	0.72	J	1.0	0.086	ug/L	1		6020B	Total Recoverable
Lead	0.67	J	1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	15		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	930	J	1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	31		5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	1200		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	460000		1000	880	ug/L	1		6020B	Total Recoverable
Total Alkalinity	400		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	330		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Carbonate Alkalinity as CaCO3	71		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	1200		20	16	mg/L	1		2540 C-2020	Total/NA
Chloride	100		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	2.3		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	450		10	3.5	mg/L	10		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 94137-F-20250307-01
Date Collected: 03/07/25 10:48
Date Received: 03/12/25 08:00

Lab Sample ID: 240-220237-1
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		03/13/25 14:00	03/14/25 15:20	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		03/13/25 14:00	03/17/25 20:42	1
Arsenic	**2.6**	**J**	5.0	0.75	ug/L		03/13/25 14:00	03/17/25 20:42	1
Barium	**45**		5.0	0.77	ug/L		03/13/25 14:00	03/17/25 20:42	1
Beryllium	ND		1.0	0.27	ug/L		03/13/25 14:00	03/17/25 20:42	1
Cadmium	**0.097**	**J**	1.0	0.077	ug/L		03/13/25 14:00	03/17/25 20:42	1
Calcium	**150000**		1000	250	ug/L		03/13/25 14:00	03/17/25 20:42	1
Chromium	**4.6**	**J**	5.0	1.2	ug/L		03/13/25 14:00	03/17/25 20:42	1
Cobalt	**160**		1.0	0.086	ug/L		03/13/25 14:00	03/17/25 20:42	1
Lead	ND		1.0	0.45	ug/L		03/13/25 14:00	03/17/25 20:42	1
Lithium	**8.7**		8.0	3.4	ug/L		03/13/25 14:00	03/17/25 20:42	1
Magnesium	**48000**		1000	61	ug/L		03/13/25 14:00	03/17/25 20:42	1
Molybdenum	**2.7**	**J**	5.0	1.1	ug/L		03/13/25 14:00	03/17/25 20:42	1
Potassium	**1800**		1000	220	ug/L		03/13/25 14:00	03/17/25 20:42	1
Selenium	ND		5.0	0.89	ug/L		03/13/25 14:00	03/17/25 20:42	1
Sodium	**63000**		1000	880	ug/L		03/13/25 14:00	03/17/25 20:42	1
Thallium	ND		1.0	0.51	ug/L		03/13/25 14:00	03/17/25 20:42	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		03/13/25 14:00	03/14/25 11:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	**350**		5.0	2.6	mg/L			03/13/25 20:20	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**350**		5.0	2.6	mg/L			03/13/25 20:20	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			03/13/25 20:20	1
Total Dissolved Solids (SM 2540 C-2020)	**900**		10	7.8	mg/L			03/13/25 09:42	1
Chloride (EPA 300.0)	**27**		1.0	0.13	mg/L			03/21/25 01:38	1
Fluoride (EPA 300.0)	**0.12**		0.050	0.024	mg/L			03/21/25 01:38	1
Sulfate (EPA 300.0)	**320**		5.0	1.7	mg/L			03/21/25 01:48	5

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.437**		0.264	0.267	1.00	0.360	pCi/L	03/14/25 07:13	04/10/25 18:10	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.0*		*30 - 110*	*03/14/25 07:13*	*04/10/25 18:10*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.912**		0.358	0.368	1.00	0.442	pCi/L	03/14/25 07:16	04/10/25 11:52	1

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-220237-1

Client Sample ID: 94137-F-20250307-01
Date Collected: 03/07/25 10:48
Date Received: 03/12/25 08:00

Lab Sample ID: 240-220237-1
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.0*		*30 - 110*	*03/14/25 07:16*	*04/10/25 11:52*	*1*
Y Carrier	*86.4*		*30 - 110*	*03/14/25 07:16*	*04/10/25 11:52*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**1.35**		0.445	0.455	5.00	0.442	pCi/L		04/10/25 17:23	1

Client Sample ID: 94136-F-20250307-01
Date Collected: 03/07/25 11:52
Date Received: 03/12/25 08:00

Lab Sample ID: 240-220237-2
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	390		100	57	ug/L		03/13/25 14:00	03/14/25 15:24	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.82	J	2.0	0.57	ug/L		03/13/25 14:00	03/17/25 21:02	1
Arsenic	ND		5.0	0.75	ug/L		03/13/25 14:00	03/17/25 21:02	1
Barium	110		5.0	0.77	ug/L		03/13/25 14:00	03/17/25 21:02	1
Beryllium	ND		1.0	0.27	ug/L		03/13/25 14:00	03/17/25 21:02	1
Cadmium	0.12	J	1.0	0.077	ug/L		03/13/25 14:00	03/17/25 21:02	1
Calcium	12000		1000	250	ug/L		03/13/25 14:00	03/17/25 21:02	1
Chromium	19		5.0	1.2	ug/L		03/13/25 14:00	03/17/25 21:02	1
Cobalt	0.53	J	1.0	0.086	ug/L		03/13/25 14:00	03/17/25 21:02	1
Lead	ND		1.0	0.45	ug/L		03/13/25 14:00	03/17/25 21:02	1
Lithium	25		8.0	3.4	ug/L		03/13/25 14:00	03/17/25 21:02	1
Magnesium	3400		1000	61	ug/L		03/13/25 14:00	03/17/25 21:02	1
Molybdenum	17		5.0	1.1	ug/L		03/13/25 14:00	03/17/25 21:02	1
Potassium	2000		1000	220	ug/L		03/13/25 14:00	03/17/25 21:02	1
Selenium	ND		5.0	0.89	ug/L		03/13/25 14:00	03/17/25 21:02	1
Sodium	760000		1000	880	ug/L		03/13/25 14:00	03/17/25 21:02	1
Thallium	ND		1.0	0.51	ug/L		03/13/25 14:00	03/17/25 21:02	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		03/13/25 14:00	03/14/25 13:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	350		5.0	2.6	mg/L			03/13/25 20:26	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	330		5.0	2.6	mg/L			03/13/25 20:26	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	17		5.0	2.6	mg/L			03/13/25 20:26	1
Total Dissolved Solids (SM 2540 C-2020)	1900		40	31	mg/L			03/13/25 09:42	1
Chloride (EPA 300.0)	840		10	1.3	mg/L			03/21/25 02:06	10
Fluoride (EPA 300.0)	1.6		0.10	0.048	mg/L			03/21/25 01:57	2
Sulfate (EPA 300.0)	58		2.0	0.70	mg/L			03/21/25 01:57	2

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.347		0.243	0.245	1.00	0.345	pCi/L	03/14/25 07:13	04/10/25 18:10	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.4*		*30 - 110*	*03/14/25 07:13*	*04/10/25 18:10*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.743		0.378	0.384	1.00	0.522	pCi/L	03/14/25 07:16	04/10/25 11:52	1

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-220237-1

Client Sample ID: 94136-F-20250307-01
Date Collected: 03/07/25 11:52
Date Received: 03/12/25 08:00

Lab Sample ID: 240-220237-2
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.4*		*30 - 110*	*03/14/25 07:16*	*04/10/25 11:52*	*1*
Y Carrier	*83.0*		*30 - 110*	*03/14/25 07:16*	*04/10/25 11:52*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**1.09**		0.449	0.456	5.00	0.522	pCi/L		04/10/25 17:23	1

Client Sample ID: 2000-F-20250307-01
Date Collected: 03/07/25 14:56
Date Received: 03/12/25 08:00

Lab Sample ID: 240-220237-3
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	330		100	57	ug/L		03/13/25 14:00	03/14/25 15:29	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		03/13/25 14:00	03/17/25 21:04	1
Arsenic	2.0	J	5.0	0.75	ug/L		03/13/25 14:00	03/17/25 21:04	1
Barium	33		5.0	0.77	ug/L		03/13/25 14:00	03/17/25 21:04	1
Beryllium	ND		1.0	0.27	ug/L		03/13/25 14:00	03/17/25 21:04	1
Cadmium	ND		1.0	0.077	ug/L		03/13/25 14:00	03/17/25 21:04	1
Calcium	2600		1000	250	ug/L		03/13/25 14:00	03/17/25 21:04	1
Chromium	9.9		5.0	1.2	ug/L		03/13/25 14:00	03/17/25 21:04	1
Cobalt	0.72	J	1.0	0.086	ug/L		03/13/25 14:00	03/17/25 21:04	1
Lead	0.67	J	1.0	0.45	ug/L		03/13/25 14:00	03/17/25 21:04	1
Lithium	15		8.0	3.4	ug/L		03/13/25 14:00	03/17/25 21:04	1
Magnesium	930	J	1000	61	ug/L		03/13/25 14:00	03/17/25 21:04	1
Molybdenum	31		5.0	1.1	ug/L		03/13/25 14:00	03/17/25 21:04	1
Potassium	1200		1000	220	ug/L		03/13/25 14:00	03/17/25 21:04	1
Selenium	ND		5.0	0.89	ug/L		03/13/25 14:00	03/17/25 21:04	1
Sodium	460000		1000	880	ug/L		03/13/25 14:00	03/17/25 21:04	1
Thallium	ND		1.0	0.51	ug/L		03/13/25 14:00	03/17/25 21:04	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		03/13/25 14:00	03/14/25 13:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	400		5.0	2.6	mg/L			03/13/25 20:32	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	330		5.0	2.6	mg/L			03/13/25 20:32	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	71		5.0	2.6	mg/L			03/13/25 20:32	1
Total Dissolved Solids (SM 2540 C-2020)	1200		20	16	mg/L			03/13/25 09:42	1
Chloride (EPA 300.0)	100		1.0	0.13	mg/L			03/21/25 02:15	1
Fluoride (EPA 300.0)	2.3		0.050	0.024	mg/L			03/21/25 02:15	1
Sulfate (EPA 300.0)	450		10	3.5	mg/L			03/21/25 02:24	10

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.223	U	0.196	0.197	1.00	0.293	pCi/L	03/14/25 07:13	04/10/25 18:11	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.2*		*30 - 110*	*03/14/25 07:13*	*04/10/25 18:11*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.567		0.363	0.367	1.00	0.536	pCi/L	03/14/25 07:16	04/10/25 12:01	1

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-220237-1

Client Sample ID: 2000-F-20250307-01
Date Collected: 03/07/25 14:56
Date Received: 03/12/25 08:00

Lab Sample ID: 240-220237-3
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.2*		*30 - 110*	*03/14/25 07:16*	*04/10/25 12:01*	*1*
Y Carrier	*81.1*		*30 - 110*	*03/14/25 07:16*	*04/10/25 12:01*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.790**		0.413	0.417	5.00	0.536	pCi/L		04/10/25 17:23	1

Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-220237-1

Method: 9315 - Radium 226 by GFPC

Matrix: Water **Prep Type: Total/NA**

		Percent Yield (Acceptance Limits)							
		Ba							
Lab Sample ID	Client Sample ID	(30-110)							
240-220237-1	94137-F-20250307-01	94.0							
240-220237-2	94136-F-20250307-01	91.4							
240-220237-3	2000-F-20250307-01	92.2							
LCS 160-707795/2-A	Lab Control Sample	90.6							
MB 160-707795/1-A	Method Blank	87.2							

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	(30-110)	(30-110)						
240-220237-1	94137-F-20250307-01	94.0	86.4						
240-220237-2	94136-F-20250307-01	91.4	83.0						
240-220237-3	2000-F-20250307-01	92.2	81.1						
LCS 160-707796/2-A	Lab Control Sample	90.6	84.1						
MB 160-707796/1-A	Method Blank	87.2	87.9						

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-648105/1-A
Matrix: Water
Analysis Batch: 648183

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 648105

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		03/13/25 14:00	03/14/25 06:15	1

Lab Sample ID: LCS 240-648105/2-A
Matrix: Water
Analysis Batch: 648183

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 648105

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1000	1060		ug/L		106	80 - 120

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-648105/1-A
Matrix: Water
Analysis Batch: 648654

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 648105

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		03/13/25 14:00	03/18/25 09:34	1
Arsenic	ND		5.0	0.75	ug/L		03/13/25 14:00	03/18/25 09:34	1
Barium	ND		5.0	0.77	ug/L		03/13/25 14:00	03/18/25 09:34	1
Beryllium	ND		1.0	0.27	ug/L		03/13/25 14:00	03/18/25 09:34	1
Cadmium	ND		1.0	0.077	ug/L		03/13/25 14:00	03/18/25 09:34	1
Calcium	ND		1000	250	ug/L		03/13/25 14:00	03/18/25 09:34	1
Chromium	ND		5.0	1.2	ug/L		03/13/25 14:00	03/18/25 09:34	1
Cobalt	ND		1.0	0.086	ug/L		03/13/25 14:00	03/18/25 09:34	1
Lead	ND		1.0	0.45	ug/L		03/13/25 14:00	03/18/25 09:34	1
Lithium	ND		8.0	3.4	ug/L		03/13/25 14:00	03/18/25 09:34	1
Magnesium	ND		1000	61	ug/L		03/13/25 14:00	03/18/25 09:34	1
Molybdenum	ND		5.0	1.1	ug/L		03/13/25 14:00	03/18/25 09:34	1
Potassium	ND		1000	220	ug/L		03/13/25 14:00	03/18/25 09:34	1
Selenium	ND		5.0	0.89	ug/L		03/13/25 14:00	03/18/25 09:34	1
Sodium	ND		1000	880	ug/L		03/13/25 14:00	03/18/25 09:34	1
Thallium	ND		1.0	0.51	ug/L		03/13/25 14:00	03/18/25 09:34	1

Lab Sample ID: LCS 240-648105/3-A
Matrix: Water
Analysis Batch: 648579

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 648105

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	97.0		ug/L		97	80 - 120
Arsenic	1000	963		ug/L		96	80 - 120
Barium	1000	964		ug/L		96	80 - 120
Beryllium	500	445		ug/L		89	80 - 120
Cadmium	500	460		ug/L		92	80 - 120
Calcium	25000	24200		ug/L		97	80 - 120
Chromium	500	496		ug/L		99	80 - 120
Cobalt	500	450		ug/L		90	80 - 120
Lead	500	517		ug/L		103	80 - 120
Lithium	500	473		ug/L		95	80 - 120
Magnesium	25000	25000		ug/L		100	80 - 120

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

Lab Sample ID: LCS 240-648105/3-A
Matrix: Water
Analysis Batch: 648579

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 648105

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Molybdenum	500	466		ug/L		93	80 - 120
Potassium	25000	26000		ug/L		104	80 - 120
Selenium	1000	937		ug/L		94	80 - 120
Sodium	25000	25400		ug/L		101	80 - 120
Thallium	1000	1090		ug/L		109	80 - 120

Lab Sample ID: 240-220237-1 MS
Matrix: Water
Analysis Batch: 648579

Client Sample ID: 94137-F-20250307-01
Prep Type: Total Recoverable
Prep Batch: 648105

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	ND		100	99.3		ug/L		99	80 - 120
Arsenic	2.6	J	1000	987		ug/L		98	80 - 120
Barium	45		1000	1030		ug/L		99	80 - 120
Beryllium	ND		500	453		ug/L		91	80 - 120
Cadmium	0.097	J	500	467		ug/L		93	80 - 120
Calcium	150000		25000	175000	4	ug/L		109	80 - 120
Chromium	4.6	J	500	504		ug/L		100	80 - 120
Cobalt	160		500	648		ug/L		97	80 - 120
Lead	ND		500	510		ug/L		102	80 - 120
Lithium	8.7		500	494		ug/L		97	80 - 120
Magnesium	48000		25000	72700		ug/L		100	80 - 120
Molybdenum	2.7	J	500	478		ug/L		95	80 - 120
Potassium	1800		25000	28200		ug/L		106	80 - 120
Selenium	ND		1000	929		ug/L		93	80 - 120
Sodium	63000		25000	89100		ug/L		104	80 - 120
Thallium	ND		1000	1100		ug/L		110	80 - 120

Lab Sample ID: 240-220237-1 MSD
Matrix: Water
Analysis Batch: 648579

Client Sample ID: 94137-F-20250307-01
Prep Type: Total Recoverable
Prep Batch: 648105

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	ND		100	100		ug/L		100	80 - 120	1	20
Arsenic	2.6	J	1000	1000		ug/L		100	80 - 120	1	20
Barium	45		1000	1030		ug/L		99	80 - 120	0	20
Beryllium	ND		500	454		ug/L		91	80 - 120	0	20
Cadmium	0.097	J	500	469		ug/L		94	80 - 120	0	20
Calcium	150000		25000	175000	4	ug/L		111	80 - 120	0	20
Chromium	4.6	J	500	507		ug/L		100	80 - 120	1	20
Cobalt	160		500	653		ug/L		98	80 - 120	1	20
Lead	ND		500	522		ug/L		104	80 - 120	2	20
Lithium	8.7		500	490		ug/L		96	80 - 120	1	20
Magnesium	48000		25000	73100		ug/L		101	80 - 120	1	20
Molybdenum	2.7	J	500	486		ug/L		97	80 - 120	2	20
Potassium	1800		25000	28700		ug/L		107	80 - 120	2	20
Selenium	ND		1000	940		ug/L		94	80 - 120	1	20
Sodium	63000		25000	89800		ug/L		107	80 - 120	1	20
Thallium	ND		1000	1120		ug/L		112	80 - 120	2	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-648112/1-A
Matrix: Water
Analysis Batch: 648290

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 648112

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		03/13/25 14:00	03/14/25 11:46	1

Lab Sample ID: LCS 240-648112/2-A
Matrix: Water
Analysis Batch: 648290

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 648112

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.71		ug/L		114	80 - 120

Lab Sample ID: 240-220237-1 MS
Matrix: Water
Analysis Batch: 648290

Client Sample ID: 94137-F-20250307-01
Prep Type: Total/NA
Prep Batch: 648112

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		1.00	1.14		ug/L		114	80 - 120

Lab Sample ID: 240-220237-1 MSD
Matrix: Water
Analysis Batch: 648290

Client Sample ID: 94137-F-20250307-01
Prep Type: Total/NA
Prep Batch: 648112

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		1.00	1.05		ug/L		105	80 - 120	8	20

Method: 2320 B-2021 - Alkalinity

Lab Sample ID: MB 240-648233/30
Matrix: Water
Analysis Batch: 648233

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	ND		5.0	2.6	mg/L			03/13/25 17:31	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/13/25 17:31	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/13/25 17:31	1

Lab Sample ID: MB 240-648233/54
Matrix: Water
Analysis Batch: 648233

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	ND		5.0	2.6	mg/L			03/13/25 19:23	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/13/25 19:23	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/13/25 19:23	1

Lab Sample ID: LCS 240-648233/53
Matrix: Water
Analysis Batch: 648233

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	280	268		mg/L		96	86 - 123

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-220237-1

Method: 2540 C-2020 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 240-648068/1
Matrix: Water
Analysis Batch: 648068

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	ND		10	7.8	mg/L			03/13/25 09:42	1

Lab Sample ID: LCS 240-648068/2
Matrix: Water
Analysis Batch: 648068

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	569	570		mg/L		100	80 - 120

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-649003/3
Matrix: Water
Analysis Batch: 649003

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.13	mg/L			03/20/25 21:58	1
Fluoride	ND		0.050	0.024	mg/L			03/20/25 21:58	1
Sulfate	ND		1.0	0.35	mg/L			03/20/25 21:58	1

Lab Sample ID: LCS 240-649003/4
Matrix: Water
Analysis Batch: 649003

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	47.8		mg/L		96	90 - 110
Fluoride	2.50	2.46		mg/L		98	90 - 110
Sulfate	50.0	46.6		mg/L		93	90 - 110

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-707795/1-A
Matrix: Water
Analysis Batch: 711925

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 707795

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.08012	U	0.164	0.164	1.00	0.299	pCi/L	03/14/25 07:13	04/10/25 18:14	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.2*		*30 - 110*	*03/14/25 07:13*	*04/10/25 18:14*	*1*

Lab Sample ID: LCS 160-707795/2-A
Matrix: Water
Analysis Batch: 711925

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 707795

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226	9.58	9.010		1.25	1.00	0.418	pCi/L	94	75 - 125

Method: 9315 - Radium 226 by GFPC (Continued)

Lab Sample ID: LCS 160-707795/2-A
Matrix: Water
Analysis Batch: 711925

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 707795

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	90.6		30 - 110

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-707796/1-A
Matrix: Water
Analysis Batch: 711916

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 707796

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.6210		0.364	0.368	1.00	0.526	pCi/L	03/14/25 07:16	04/10/25 11:50	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	87.2		30 - 110	03/14/25 07:16	04/10/25 11:50	1
Y Carrier	87.9		30 - 110	03/14/25 07:16	04/10/25 11:50	1

Lab Sample ID: LCS 160-707796/2-A
Matrix: Water
Analysis Batch: 711916

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 707796

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228			9.55	10.75		1.41	1.00	0.483	pCi/L	113	75 - 125		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	90.6		30 - 110
Y Carrier	84.1		30 - 110

Metals

Prep Batch: 648105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220237-1	94137-F-20250307-01	Total Recoverable	Water	3005A	
240-220237-2	94136-F-20250307-01	Total Recoverable	Water	3005A	
240-220237-3	2000-F-20250307-01	Total Recoverable	Water	3005A	
MB 240-648105/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-648105/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-648105/3-A	Lab Control Sample	Total Recoverable	Water	3005A	
240-220237-1 MS	94137-F-20250307-01	Total Recoverable	Water	3005A	
240-220237-1 MSD	94137-F-20250307-01	Total Recoverable	Water	3005A	

Prep Batch: 648112

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220237-1	94137-F-20250307-01	Total/NA	Water	7470A	
240-220237-2	94136-F-20250307-01	Total/NA	Water	7470A	
240-220237-3	2000-F-20250307-01	Total/NA	Water	7470A	
MB 240-648112/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-648112/2-A	Lab Control Sample	Total/NA	Water	7470A	
240-220237-1 MS	94137-F-20250307-01	Total/NA	Water	7470A	
240-220237-1 MSD	94137-F-20250307-01	Total/NA	Water	7470A	

Analysis Batch: 648183

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-648105/1-A	Method Blank	Total Recoverable	Water	6010D	648105
LCS 240-648105/2-A	Lab Control Sample	Total Recoverable	Water	6010D	648105

Analysis Batch: 648290

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220237-1	94137-F-20250307-01	Total/NA	Water	7470A	648112
MB 240-648112/1-A	Method Blank	Total/NA	Water	7470A	648112
LCS 240-648112/2-A	Lab Control Sample	Total/NA	Water	7470A	648112
240-220237-1 MS	94137-F-20250307-01	Total/NA	Water	7470A	648112
240-220237-1 MSD	94137-F-20250307-01	Total/NA	Water	7470A	648112

Analysis Batch: 648322

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220237-2	94136-F-20250307-01	Total/NA	Water	7470A	648112
240-220237-3	2000-F-20250307-01	Total/NA	Water	7470A	648112

Analysis Batch: 648382

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220237-1	94137-F-20250307-01	Total Recoverable	Water	6010D	648105
240-220237-2	94136-F-20250307-01	Total Recoverable	Water	6010D	648105
240-220237-3	2000-F-20250307-01	Total Recoverable	Water	6010D	648105

Analysis Batch: 648579

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220237-1	94137-F-20250307-01	Total Recoverable	Water	6020B	648105
240-220237-2	94136-F-20250307-01	Total Recoverable	Water	6020B	648105
240-220237-3	2000-F-20250307-01	Total Recoverable	Water	6020B	648105
LCS 240-648105/3-A	Lab Control Sample	Total Recoverable	Water	6020B	648105
240-220237-1 MS	94137-F-20250307-01	Total Recoverable	Water	6020B	648105
240-220237-1 MSD	94137-F-20250307-01	Total Recoverable	Water	6020B	648105

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-220237-1

Metals

Analysis Batch: 648654

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-648105/1-A	Method Blank	Total Recoverable	Water	6020B	648105

General Chemistry

Analysis Batch: 648068

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220237-1	94137-F-20250307-01	Total/NA	Water	2540 C-2020	
240-220237-2	94136-F-20250307-01	Total/NA	Water	2540 C-2020	
240-220237-3	2000-F-20250307-01	Total/NA	Water	2540 C-2020	
MB 240-648068/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-648068/2	Lab Control Sample	Total/NA	Water	2540 C-2020	

Analysis Batch: 648233

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220237-1	94137-F-20250307-01	Total/NA	Water	2320 B-2021	
240-220237-2	94136-F-20250307-01	Total/NA	Water	2320 B-2021	
240-220237-3	2000-F-20250307-01	Total/NA	Water	2320 B-2021	
MB 240-648233/30	Method Blank	Total/NA	Water	2320 B-2021	
MB 240-648233/54	Method Blank	Total/NA	Water	2320 B-2021	
LCS 240-648233/53	Lab Control Sample	Total/NA	Water	2320 B-2021	

Analysis Batch: 649003

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220237-1	94137-F-20250307-01	Total/NA	Water	300.0	
240-220237-1	94137-F-20250307-01	Total/NA	Water	300.0	
240-220237-2	94136-F-20250307-01	Total/NA	Water	300.0	
240-220237-2	94136-F-20250307-01	Total/NA	Water	300.0	
240-220237-3	2000-F-20250307-01	Total/NA	Water	300.0	
240-220237-3	2000-F-20250307-01	Total/NA	Water	300.0	
MB 240-649003/3	Method Blank	Total/NA	Water	300.0	
LCS 240-649003/4	Lab Control Sample	Total/NA	Water	300.0	

Rad

Prep Batch: 707795

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220237-1	94137-F-20250307-01	Total/NA	Water	PrecSep-21	
240-220237-2	94136-F-20250307-01	Total/NA	Water	PrecSep-21	
240-220237-3	2000-F-20250307-01	Total/NA	Water	PrecSep-21	
MB 160-707795/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-707795/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 707796

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220237-1	94137-F-20250307-01	Total/NA	Water	PrecSep_0	
240-220237-2	94136-F-20250307-01	Total/NA	Water	PrecSep_0	
240-220237-3	2000-F-20250307-01	Total/NA	Water	PrecSep_0	
MB 160-707796/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-707796/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Client Sample ID: 94137-F-20250307-01
Lab Sample ID: 240-220237-1

Date Collected: 03/07/25 10:48
Matrix: Water
Date Received: 03/12/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			648105	MN7X	EET CLE	03/13/25 14:00
Total Recoverable	Analysis	6010D		1	648382	AJC	EET CLE	03/14/25 15:20
Total Recoverable	Prep	3005A			648105	MN7X	EET CLE	03/13/25 14:00
Total Recoverable	Analysis	6020B		1	648579	RKT	EET CLE	03/17/25 20:42
Total/NA	Prep	7470A			648112	MN7X	EET CLE	03/13/25 14:00
Total/NA	Analysis	7470A		1	648290	GEV	EET CLE	03/14/25 11:49
Total/NA	Analysis	2320 B-2021		1	648233	PQD2	EET CLE	03/13/25 20:20
Total/NA	Analysis	2540 C-2020		1	648068	C5SV	EET CLE	03/13/25 09:42
Total/NA	Analysis	300.0		1	649003	JMR	EET CLE	03/21/25 01:38
Total/NA	Analysis	300.0		5	649003	JMR	EET CLE	03/21/25 01:48
Total/NA	Prep	PrecSep-21			707795	OGC	EET SL	03/14/25 07:13
Total/NA	Analysis	9315		1	711926	FLC	EET SL	04/10/25 18:10
Total/NA	Prep	PrecSep_0			707796	OGC	EET SL	03/14/25 07:16
Total/NA	Analysis	9320		1	711916	SWS	EET SL	04/10/25 11:52
Total/NA	Analysis	Ra226_Ra228		1	711957	EMH	EET SL	04/10/25 17:23

Client Sample ID: 94136-F-20250307-01
Lab Sample ID: 240-220237-2

Date Collected: 03/07/25 11:52
Matrix: Water
Date Received: 03/12/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			648105	MN7X	EET CLE	03/13/25 14:00
Total Recoverable	Analysis	6010D		1	648382	AJC	EET CLE	03/14/25 15:24
Total Recoverable	Prep	3005A			648105	MN7X	EET CLE	03/13/25 14:00
Total Recoverable	Analysis	6020B		1	648579	RKT	EET CLE	03/17/25 21:02
Total/NA	Prep	7470A			648112	MN7X	EET CLE	03/13/25 14:00
Total/NA	Analysis	7470A		1	648322	GEV	EET CLE	03/14/25 13:35
Total/NA	Analysis	2320 B-2021		1	648233	PQD2	EET CLE	03/13/25 20:26
Total/NA	Analysis	2540 C-2020		1	648068	C5SV	EET CLE	03/13/25 09:42
Total/NA	Analysis	300.0		2	649003	JMR	EET CLE	03/21/25 01:57
Total/NA	Analysis	300.0		10	649003	JMR	EET CLE	03/21/25 02:06
Total/NA	Prep	PrecSep-21			707795	OGC	EET SL	03/14/25 07:13
Total/NA	Analysis	9315		1	711926	FLC	EET SL	04/10/25 18:10
Total/NA	Prep	PrecSep_0			707796	OGC	EET SL	03/14/25 07:16
Total/NA	Analysis	9320		1	711916	SWS	EET SL	04/10/25 11:52
Total/NA	Analysis	Ra226_Ra228		1	711957	EMH	EET SL	04/10/25 17:23

Client Sample ID: 2000-F-20250307-01
Lab Sample ID: 240-220237-3

Date Collected: 03/07/25 14:56
Matrix: Water
Date Received: 03/12/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			648105	MN7X	EET CLE	03/13/25 14:00
Total Recoverable	Analysis	6010D		1	648382	AJC	EET CLE	03/14/25 15:29

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-220237-1
Project/Site: Federal CCR Wells

Client Sample ID: 2000-F-20250307-01
Lab Sample ID: 240-220237-3
Date Collected: 03/07/25 14:56
Matrix: Water
Date Received: 03/12/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			648105	MN7X	EET CLE	03/13/25 14:00
Total Recoverable	Analysis	6020B		1	648579	RKT	EET CLE	03/17/25 21:04
Total/NA	Prep	7470A			648112	MN7X	EET CLE	03/13/25 14:00
Total/NA	Analysis	7470A		1	648322	GEV	EET CLE	03/14/25 13:37
Total/NA	Analysis	2320 B-2021		1	648233	PQD2	EET CLE	03/13/25 20:32
Total/NA	Analysis	2540 C-2020		1	648068	C5SV	EET CLE	03/13/25 09:42
Total/NA	Analysis	300.0		1	649003	JMR	EET CLE	03/21/25 02:15
Total/NA	Analysis	300.0		10	649003	JMR	EET CLE	03/21/25 02:24
Total/NA	Prep	PrecSep-21			707795	OGC	EET SL	03/14/25 07:13
Total/NA	Analysis	9315		1	711926	FLC	EET SL	04/10/25 18:11
Total/NA	Prep	PrecSep_0			707796	OGC	EET SL	03/14/25 07:16
Total/NA	Analysis	9320		1	711925	FLC	EET SL	04/10/25 12:01
Total/NA	Analysis	Ra226_Ra228		1	711957	EMH	EET SL	04/10/25 17:23

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

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

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-220237-1
Project/Site: Federal CCR Wells

Laboratory: Eurofins Cleveland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0806	12-31-26
Georgia	State	4062	02-27-26
Illinois	NELAP	200004	08-31-25
Iowa	State	421	06-01-25
Kansas	NELAP	E-10336	01-31-26
Kentucky (UST)	State	112225	02-28-26
Kentucky (WW)	State	KY98016	12-31-25
Minnesota	NELAP	039-999-348	12-31-25
New Hampshire	NELAP	225024	09-30-25
New Jersey	NELAP	OH001	07-03-25
New York	NELAP	10975	03-31-25
Ohio	State	8303	11-04-25
Ohio VAP	State	ORELAP 4062	02-28-26
Oregon	NELAP	4062	02-27-26
Pennsylvania	NELAP	68-00340	08-31-25
Texas	NELAP	T104704517-22-19	08-31-25
US Fish & Wildlife	US Federal Programs	A26406	02-28-26
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	09-14-25
West Virginia DEP	State	210	12-31-25
Wisconsin	State	399167560	08-31-25

Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-25
ANAB	Dept. of Defense ELAP	L2305	04-06-27
ANAB	Dept. of Energy	L2305.01	04-06-27
Arizona	State	AZ0813	12-08-25
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-25
Connecticut	State	PH-0241	03-31-25 *
Florida	NELAP	E87689	06-30-25
HI - RadChem Recognition	State	n/a	06-30-25
Illinois	NELAP	200023	11-30-25
Iowa	State	373	12-01-26
Kansas	NELAP	E-10236	10-31-25
Kentucky (DW)	State	KY90125	12-31-25
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-25
Louisiana (All)	NELAP	106151	06-30-25
Louisiana (DW)	State	LA011	12-31-25
Maryland	State	310	09-30-25
Massachusetts	State	M-MO054	06-30-25
MI - RadChem Recognition	State	9005	06-30-25
Missouri	State	780	06-30-25
Nevada	State	MO00054	07-31-25
New Jersey	NELAP	MO002	06-30-25
New Mexico	State	MO00054	06-30-25

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-220237-1
Project/Site: Federal CCR Wells

Laboratory: Eurofins St. Louis (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	11616	03-31-26
North Carolina (DW)	State	29700	07-31-25
North Dakota	State	R-207	06-30-25
Oklahoma	NELAP	9997	08-31-25
Oregon	NELAP	4157	09-01-25
Pennsylvania	NELAP	68-00540	02-28-26
South Carolina	State	85002	06-30-25
Texas	NELAP	T104704193	07-31-25
US Fish & Wildlife	US Federal Programs	058448	07-31-25
USDA	US Federal Programs	525-23-138-94730	05-18-26
Utah	NELAP	MO00054	07-31-25
Virginia	NELAP	460230	06-14-25
Washington	State	C592	08-30-25
West Virginia DEP	State	381	10-31-25

3/7/25

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins
Environment Testing

Client Information	Sampler: Bobby Caste	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s):	COC No. 240-111832-39818.1
Client Contact: Taylor Huffman	Phone: 740-373-4308	E-Mail: roxanne.cisneros@et.eurofinsus.com	State of Origin:	Page: Page 1 of 8
Company: Lightstone Generation Gavin Power LLC	PWSID			Job #:
Address: 7397 OH-7	Due Date Requested:			
City: Cheshire	TAT Requested (days):			
State, Zip: OH, 45620	Compliance Project: Δ Yes Δ No			
Phone: 740-925-3171(Tel)	PO #: 2935505			
Email: taylor.huffman@lightstonegen.com	WO #:			
Project Name: Gavin CCR	Project #: 24019633			
Site: Gavin	SSOW#:			

Analysis Requested

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wasteoil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B, 6020, 7470A	2540C_Calcd - TDS	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	300.0_28D - Chloride, Fluoride & Sulfate	2320B - (MOD) Alkalinity	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	N	D	N	N		
94137-F-20250307-01	3-7-25	1048	G	Water			1	1	2	1	1		
94136-F-20250307-01	3-7-25	1152	G	Water			1	1	2	1	1		
2000-F-20250307-01	3-7-25	1456	G	Water			1	1	2	1	1		
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									

240-220237 COC

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
Bobby Caste	3-11-25/0950	KEMRON		3/11/25 2:55p	WaypT
	3/11/25 6:20	WP		3-12-25 800	FC
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins - Cleveland Sample Receipt Form/Narrative Login #:
Barberton Facility

Client Lightstone Cogvin Site Name

Cooler Received on 3-12-25 Opened on 3-12-25

Cooler unpacked by:

FedEx: 1st Grd Exp UPS FAS (Waypoint) Client Drop Off Eurofins Courier Other

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

Eurofins Cooler # 1 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 # 13 (CF 0.0 °C) Observed Cooler Temp. 1.7 °C Corrected Cooler Temp. 1.7 °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	(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# HC448976
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.

3/12/2025

Login Container Summary Report

240-220237

4/11/2025

Temperature readings _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
94137-F-20250307-01	240-220237-A-1	Plastic 60 mL - unpreserved				
94137-F-20250307-01	240-220237-B-1	Plastic 60 mL - unpreserved				
94137-F-20250307-01	240-220237-C-1	Plastic 500ml - unpreserved				
94137-F-20250307-01	240-220237-D-1	Plastic 500ml - with Nitric Acid	<2			
94137-F-20250307-01	240-220237-E-1	Plastic 1 liter - Nitric Acid	<2			
94137-F-20250307-01	240-220237-F-1	Plastic 1 liter - Nitric Acid	<2			
94136-F-20250307-01	240-220237-A-2	Plastic 60 mL - unpreserved				
94136-F-20250307-01	240-220237-B-2	Plastic 60 mL - unpreserved				
94136-F-20250307-01	240-220237-C-2	Plastic 500ml - unpreserved				
94136-F-20250307-01	240-220237-D-2	Plastic 500ml - with Nitric Acid	<2			
94136-F-20250307-01	240-220237-E-2	Plastic 1 liter - Nitric Acid	<2			
94136-F-20250307-01	240-220237-F-2	Plastic 1 liter - Nitric Acid	<2			
2000-F-20250307-01	240-220237-A-3	Plastic 60 mL - unpreserved				
2000-F-20250307-01	240-220237-B-3	Plastic 60 mL - unpreserved				
2000-F-20250307-01	240-220237-C-3	Plastic 500ml - unpreserved				
2000-F-20250307-01	240-220237-D-3	Plastic 500ml - with Nitric Acid	<2			
2000-F-20250307-01	240-220237-E-3	Plastic 1 liter - Nitric Acid	<2			
2000-F-20250307-01	240-220237-F-3	Plastic 1 liter - Nitric Acid	<2			

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s): N/A	COC No: 240-199715.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: roxanne.cisneros@et.eurofinsus.com	State of Origin: Ohio	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): N/A		Job #: 240-220237-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 3/25/2025			Preservation Codes: -
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Federal GWM Wells	Project #: 24019633			
Site: N/A	SSOW#: N/A			Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9320_Ra228/PrecSep_0 Radium-228 (GFPC)	9315_Ra226/PrecSep_21 Radium-226 (GFPC)	Ra226Ra228_GFPC/ Combined Radium-226 and Radium-228	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
94137-F-20250307-01 (240-220237-1)	3/7/25	10:48 Eastern	G	Water			X	X	X	2	
94136-F-20250307-01 (240-220237-2)	3/7/25	11:52 Eastern	G	Water			X	X	X	2	
2000-F-20250307-01 (240-220237-3)	3/7/25	14:56 Eastern	G	Water			X	X	X	2	

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

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

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
lCMartin	3/12/25	EUR	[signature]	0830 MAR 13 2025	
Relinquished by:	Date/Time:	Company	Received by: Cheyenne Forrest	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:

4/11/2025

Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-220237-1

Login Number: 220237
List Number: 2
Creator: Forrest, Cheyenne L

List Source: Eurofins St. Louis
List Creation: 03/13/25 11:40 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?	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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620

Generated 4/9/2025 3:18:35 PM

JOB DESCRIPTION

Federal CCR Wells

JOB NUMBER

240-220243-1

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization

Roxanne Cisneros

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4/9/2025 3:18:35 PM

Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(330)497-9396

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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-220243-1

Qualifiers

Metals

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

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

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

Job ID: 240-220243-1 — Eurofins Cleveland

Job Narrative
240-220243-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The sample was received on 3/12/2025 8:00 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice.

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

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

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

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

Method Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-220243-1
Project/Site: Federal CCR Wells

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CLE
6020B	Metals (ICP/MS)	SW846	EET CLE
7470A	Mercury (CVAA)	SW846	EET CLE
2320 B-2021	Alkalinity	SM	EET CLE
2540 C-2020	Solids, Total Dissolved (TDS)	SM	EET CLE
300.0	Anions, Ion Chromatography	EPA	EET CLE
9315	Radium 226 by GFPC	SW846	EET SL
9320	Radium-228 (GFPC)	SW846	EET SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	EET SL
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CLE
7470A	Preparation, Mercury	SW846	EET CLE
PrecSep_0	Preparation, Precipitate Separation	None	EET SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	EET SL

Protocol References:

EPA = US Environmental Protection Agency

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:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

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

Sample Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-220243-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-220243-1	2022-06-F-20250307-01	Water	03/07/25 13:40	03/12/25 08:00

Detection Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-220243-1

Client Sample ID: 2022-06-F-20250307-01

Lab Sample ID: 240-220243-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	140		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	2.3	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	330		5.0	0.77	ug/L	1		6020B	Total Recoverable
Calcium	59000		1000	250	ug/L	1		6020B	Total Recoverable
Chromium	3.0	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	2.3		1.0	0.086	ug/L	1		6020B	Total Recoverable
Lead	0.93	J	1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	12		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	12000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	12		5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	1900		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	240000		1000	880	ug/L	1		6020B	Total Recoverable
Total Alkalinity	520		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	520		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	790		10	7.8	mg/L	1		2540 C-2020	Total/NA
Chloride	130		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.96		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	20		1.0	0.35	mg/L	1		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 2022-06-F-20250307-01
Date Collected: 03/07/25 13:40
Date Received: 03/12/25 08:00

Lab Sample ID: 240-220243-1
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**140**		100	57	ug/L		03/13/25 14:00	03/14/25 15:34	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		03/13/25 14:00	03/17/25 21:07	1
Arsenic	**2.3**	**J**	5.0	0.75	ug/L		03/13/25 14:00	03/17/25 21:07	1
Barium	**330**		5.0	0.77	ug/L		03/13/25 14:00	03/17/25 21:07	1
Beryllium	ND		1.0	0.27	ug/L		03/13/25 14:00	03/17/25 21:07	1
Cadmium	ND		1.0	0.077	ug/L		03/13/25 14:00	03/17/25 21:07	1
Calcium	**59000**		1000	250	ug/L		03/13/25 14:00	03/17/25 21:07	1
Chromium	**3.0**	**J**	5.0	1.2	ug/L		03/13/25 14:00	03/17/25 21:07	1
Cobalt	**2.3**		1.0	0.086	ug/L		03/13/25 14:00	03/17/25 21:07	1
Lead	**0.93**	**J**	1.0	0.45	ug/L		03/13/25 14:00	03/17/25 21:07	1
Lithium	**12**		8.0	3.4	ug/L		03/13/25 14:00	03/17/25 21:07	1
Magnesium	**12000**		1000	61	ug/L		03/13/25 14:00	03/17/25 21:07	1
Molybdenum	**12**		5.0	1.1	ug/L		03/13/25 14:00	03/17/25 21:07	1
Potassium	**1900**		1000	220	ug/L		03/13/25 14:00	03/17/25 21:07	1
Selenium	ND		5.0	0.89	ug/L		03/13/25 14:00	03/17/25 21:07	1
Sodium	**240000**		1000	880	ug/L		03/13/25 14:00	03/17/25 21:07	1
Thallium	ND		1.0	0.51	ug/L		03/13/25 14:00	03/17/25 21:07	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		03/13/25 14:00	03/14/25 13:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	**520**		5.0	2.6	mg/L			03/13/25 20:38	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**520**		5.0	2.6	mg/L			03/13/25 20:38	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			03/13/25 20:38	1
Total Dissolved Solids (SM 2540 C-2020)	**790**		10	7.8	mg/L			03/13/25 09:42	1
Chloride (EPA 300.0)	**130**		1.0	0.13	mg/L			03/21/25 02:33	1
Fluoride (EPA 300.0)	**0.96**		0.050	0.024	mg/L			03/21/25 02:33	1
Sulfate (EPA 300.0)	**20**		1.0	0.35	mg/L			03/21/25 02:33	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.558	U	0.463	0.466	1.00	0.695	pCi/L	03/14/25 07:08	04/08/25 16:57	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.4*		*30 - 110*	*03/14/25 07:08*	*04/08/25 16:57*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**1.44**		0.700	0.713	1.00	0.947	pCi/L	03/14/25 07:11	04/08/25 12:01	1

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-220243-1

Client Sample ID: 2022-06-F-20250307-01
Date Collected: 03/07/25 13:40
Date Received: 03/12/25 08:00

Lab Sample ID: 240-220243-1
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.4*		*30 - 110*	*03/14/25 07:11*	*04/08/25 12:01*	*1*
Y Carrier	*85.6*		*30 - 110*	*03/14/25 07:11*	*04/08/25 12:01*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**2.00**		0.839	0.852	5.00	0.947	pCi/L		04/09/25 14:07	1

Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-220243-1

Method: 9315 - Radium 226 by GFPC

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)							
		Ba							
Lab Sample ID	Client Sample ID	(30-110)							
240-220243-1	2022-06-F-20250307-01	92.4							
LCS 160-707726/2-A	Lab Control Sample	86.5							
MB 160-707726/1-A	Method Blank	93.0							

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	(30-110)	(30-110)						
240-220243-1	2022-06-F-20250307-01	92.4	85.6						
LCS 160-707794/2-A	Lab Control Sample	86.5	86.0						
MB 160-707794/1-A	Method Blank	93.0	83.7						

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-648105/1-A
Matrix: Water
Analysis Batch: 648183

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 648105

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		03/13/25 14:00	03/14/25 06:15	1

Lab Sample ID: LCS 240-648105/2-A
Matrix: Water
Analysis Batch: 648183

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 648105

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1000	1060		ug/L		106	80 - 120

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-648105/1-A
Matrix: Water
Analysis Batch: 648654

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 648105

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		03/13/25 14:00	03/18/25 09:34	1
Arsenic	ND		5.0	0.75	ug/L		03/13/25 14:00	03/18/25 09:34	1
Barium	ND		5.0	0.77	ug/L		03/13/25 14:00	03/18/25 09:34	1
Beryllium	ND		1.0	0.27	ug/L		03/13/25 14:00	03/18/25 09:34	1
Cadmium	ND		1.0	0.077	ug/L		03/13/25 14:00	03/18/25 09:34	1
Calcium	ND		1000	250	ug/L		03/13/25 14:00	03/18/25 09:34	1
Chromium	ND		5.0	1.2	ug/L		03/13/25 14:00	03/18/25 09:34	1
Cobalt	ND		1.0	0.086	ug/L		03/13/25 14:00	03/18/25 09:34	1
Lead	ND		1.0	0.45	ug/L		03/13/25 14:00	03/18/25 09:34	1
Lithium	ND		8.0	3.4	ug/L		03/13/25 14:00	03/18/25 09:34	1
Magnesium	ND		1000	61	ug/L		03/13/25 14:00	03/18/25 09:34	1
Molybdenum	ND		5.0	1.1	ug/L		03/13/25 14:00	03/18/25 09:34	1
Potassium	ND		1000	220	ug/L		03/13/25 14:00	03/18/25 09:34	1
Selenium	ND		5.0	0.89	ug/L		03/13/25 14:00	03/18/25 09:34	1
Sodium	ND		1000	880	ug/L		03/13/25 14:00	03/18/25 09:34	1
Thallium	ND		1.0	0.51	ug/L		03/13/25 14:00	03/18/25 09:34	1

Lab Sample ID: LCS 240-648105/3-A
Matrix: Water
Analysis Batch: 648579

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 648105

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	97.0		ug/L		97	80 - 120
Arsenic	1000	963		ug/L		96	80 - 120
Barium	1000	964		ug/L		96	80 - 120
Beryllium	500	445		ug/L		89	80 - 120
Cadmium	500	460		ug/L		92	80 - 120
Calcium	25000	24200		ug/L		97	80 - 120
Chromium	500	496		ug/L		99	80 - 120
Cobalt	500	450		ug/L		90	80 - 120
Lead	500	517		ug/L		103	80 - 120
Lithium	500	473		ug/L		95	80 - 120
Magnesium	25000	25000		ug/L		100	80 - 120

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

Lab Sample ID: LCS 240-648105/3-A
Matrix: Water
Analysis Batch: 648579

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 648105

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Molybdenum	500	466		ug/L		93	80 - 120
Potassium	25000	26000		ug/L		104	80 - 120
Selenium	1000	937		ug/L		94	80 - 120
Sodium	25000	25400		ug/L		101	80 - 120
Thallium	1000	1090		ug/L		109	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-648112/1-A
Matrix: Water
Analysis Batch: 648290

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 648112

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		03/13/25 14:00	03/14/25 11:46	1

Lab Sample ID: LCS 240-648112/2-A
Matrix: Water
Analysis Batch: 648290

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 648112

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.71		ug/L		114	80 - 120

Method: 2320 B-2021 - Alkalinity

Lab Sample ID: MB 240-648233/30
Matrix: Water
Analysis Batch: 648233

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	ND		5.0	2.6	mg/L			03/13/25 17:31	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/13/25 17:31	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/13/25 17:31	1

Lab Sample ID: MB 240-648233/54
Matrix: Water
Analysis Batch: 648233

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	ND		5.0	2.6	mg/L			03/13/25 19:23	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/13/25 19:23	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/13/25 19:23	1

Lab Sample ID: LCS 240-648233/53
Matrix: Water
Analysis Batch: 648233

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	280	268		mg/L		96	86 - 123

Method: 2540 C-2020 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 240-648068/1
Matrix: Water
Analysis Batch: 648068

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	ND		10	7.8	mg/L			03/13/25 09:42	1

Lab Sample ID: LCS 240-648068/2
Matrix: Water
Analysis Batch: 648068

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	569	570		mg/L		100	80 - 120

Lab Sample ID: 240-220243-1 DU
Matrix: Water
Analysis Batch: 648068

Client Sample ID: 2022-06-F-20250307-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	790		789		mg/L		0.6	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-649003/3
Matrix: Water
Analysis Batch: 649003

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.13	mg/L			03/20/25 21:58	1
Fluoride	ND		0.050	0.024	mg/L			03/20/25 21:58	1
Sulfate	ND		1.0	0.35	mg/L			03/20/25 21:58	1

Lab Sample ID: LCS 240-649003/4
Matrix: Water
Analysis Batch: 649003

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	47.8		mg/L		96	90 - 110
Fluoride	2.50	2.46		mg/L		98	90 - 110
Sulfate	50.0	46.6		mg/L		93	90 - 110

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-707726/1-A
Matrix: Water
Analysis Batch: 711359

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 707726

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.03855	U	0.144	0.144	1.00	0.324	pCi/L	03/14/25 07:08	04/08/25 16:07	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.0*		*30 - 110*	*03/14/25 07:08*	*04/08/25 16:07*	*1*

Method: 9315 - Radium 226 by GFPC (Continued)

Lab Sample ID: LCS 160-707726/2-A
Matrix: Water
Analysis Batch: 711359

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 707726

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-226			9.58	8.596		1.20	1.00	0.311	pCi/L	90	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*86.5*		*30 - 110*

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-707794/1-A
Matrix: Water
Analysis Batch: 711551

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 707794

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.4917	U	0.431	0.434	1.00	0.686	pCi/L	03/14/25 07:11	04/08/25 11:44	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.0*		*30 - 110*	*03/14/25 07:11*	*04/08/25 11:44*	*1*
Y Carrier	*83.7*		*30 - 110*	*03/14/25 07:11*	*04/08/25 11:44*	*1*

Lab Sample ID: LCS 160-707794/2-A
Matrix: Water
Analysis Batch: 711359

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 707794

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228			9.56	9.904		1.34	1.00	0.552	pCi/L	104	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*86.5*		*30 - 110*
Y Carrier	*86.0*		*30 - 110*

Metals

Prep Batch: 648105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220243-1	2022-06-F-20250307-01	Total Recoverable	Water	3005A	
MB 240-648105/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-648105/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-648105/3-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 648112

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220243-1	2022-06-F-20250307-01	Total/NA	Water	7470A	
MB 240-648112/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-648112/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 648183

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-648105/1-A	Method Blank	Total Recoverable	Water	6010D	648105
LCS 240-648105/2-A	Lab Control Sample	Total Recoverable	Water	6010D	648105

Analysis Batch: 648290

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-648112/1-A	Method Blank	Total/NA	Water	7470A	648112
LCS 240-648112/2-A	Lab Control Sample	Total/NA	Water	7470A	648112

Analysis Batch: 648322

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220243-1	2022-06-F-20250307-01	Total/NA	Water	7470A	648112

Analysis Batch: 648382

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220243-1	2022-06-F-20250307-01	Total Recoverable	Water	6010D	648105

Analysis Batch: 648579

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220243-1	2022-06-F-20250307-01	Total Recoverable	Water	6020B	648105
LCS 240-648105/3-A	Lab Control Sample	Total Recoverable	Water	6020B	648105

Analysis Batch: 648654

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-648105/1-A	Method Blank	Total Recoverable	Water	6020B	648105

General Chemistry

Analysis Batch: 648068

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220243-1	2022-06-F-20250307-01	Total/NA	Water	2540 C-2020	
MB 240-648068/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-648068/2	Lab Control Sample	Total/NA	Water	2540 C-2020	
240-220243-1 DU	2022-06-F-20250307-01	Total/NA	Water	2540 C-2020	

Analysis Batch: 648233

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220243-1	2022-06-F-20250307-01	Total/NA	Water	2320 B-2021	
MB 240-648233/30	Method Blank	Total/NA	Water	2320 B-2021	

General Chemistry (Continued)

Analysis Batch: 648233 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-648233/54	Method Blank	Total/NA	Water	2320 B-2021	
LCS 240-648233/53	Lab Control Sample	Total/NA	Water	2320 B-2021	

Analysis Batch: 649003

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220243-1	2022-06-F-20250307-01	Total/NA	Water	300.0	
MB 240-649003/3	Method Blank	Total/NA	Water	300.0	
LCS 240-649003/4	Lab Control Sample	Total/NA	Water	300.0	

Rad

Prep Batch: 707726

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220243-1	2022-06-F-20250307-01	Total/NA	Water	PrecSep-21	
MB 160-707726/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-707726/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 707794

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220243-1	2022-06-F-20250307-01	Total/NA	Water	PrecSep_0	
MB 160-707794/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-707794/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-220243-1
Project/Site: Federal CCR Wells

Client Sample ID: 2022-06-F-20250307-01
Lab Sample ID: 240-220243-1
Date Collected: 03/07/25 13:40
Matrix: Water
Date Received: 03/12/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			648105	MN7X	EET CLE	03/13/25 14:00
Total Recoverable	Analysis	6010D		1	648382	AJC	EET CLE	03/14/25 15:34
Total Recoverable	Prep	3005A			648105	MN7X	EET CLE	03/13/25 14:00
Total Recoverable	Analysis	6020B		1	648579	RKT	EET CLE	03/17/25 21:07
Total/NA	Prep	7470A			648112	MN7X	EET CLE	03/13/25 14:00
Total/NA	Analysis	7470A		1	648322	GEV	EET CLE	03/14/25 13:38
Total/NA	Analysis	2320 B-2021		1	648233	PQD2	EET CLE	03/13/25 20:38
Total/NA	Analysis	2540 C-2020		1	648068	C5SV	EET CLE	03/13/25 09:42
Total/NA	Analysis	300.0		1	649003	JMR	EET CLE	03/21/25 02:33
Total/NA	Prep	PrecSep-21			707726	OGC	EET SL	03/14/25 07:08
Total/NA	Analysis	9315		1	711359	SCB	EET SL	04/08/25 16:57
Total/NA	Prep	PrecSep_0			707794	OGC	EET SL	03/14/25 07:11
Total/NA	Analysis	9320		1	711519	CMM	EET SL	04/08/25 12:01
Total/NA	Analysis	Ra226_Ra228		1	711562	FLC	EET SL	04/09/25 14:07

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

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

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-220243-1
Project/Site: Federal CCR Wells

Laboratory: Eurofins Cleveland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0806	12-31-26
Georgia	State	4062	02-27-26
Illinois	NELAP	200004	08-31-25
Iowa	State	421	06-01-25
Kansas	NELAP	E-10336	01-31-26
Kentucky (UST)	State	112225	02-28-26
Kentucky (WW)	State	KY98016	12-31-25
Minnesota	NELAP	039-999-348	12-31-25
New Hampshire	NELAP	225024	09-30-25
New Jersey	NELAP	OH001	07-03-25
New York	NELAP	10975	03-31-25
Ohio	State	8303	11-04-25
Ohio VAP	State	ORELAP 4062	02-28-26
Oregon	NELAP	4062	02-27-26
Pennsylvania	NELAP	68-00340	08-31-25
Texas	NELAP	T104704517-22-19	08-31-25
US Fish & Wildlife	US Federal Programs	A26406	02-28-26
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	09-14-25
West Virginia DEP	State	210	12-31-25
Wisconsin	State	399167560	08-31-25

Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-25
ANAB	Dept. of Defense ELAP	L2305	04-06-27
ANAB	Dept. of Energy	L2305.01	04-06-27
Arizona	State	AZ0813	12-08-25
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-25
Connecticut	State	PH-0241	03-31-25 *
Florida	NELAP	E87689	06-30-25
HI - RadChem Recognition	State	n/a	06-30-25
Illinois	NELAP	200023	11-30-25
Iowa	State	373	12-01-26
Kansas	NELAP	E-10236	10-31-25
Kentucky (DW)	State	KY90125	12-31-25
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-25
Louisiana (All)	NELAP	106151	06-30-25
Louisiana (DW)	State	LA011	12-31-25
Maryland	State	310	09-30-25
Massachusetts	State	M-MO054	06-30-25
MI - RadChem Recognition	State	9005	06-30-25
Missouri	State	780	06-30-25
Nevada	State	MO00054	07-31-25
New Jersey	NELAP	MO002	06-30-25
New Mexico	State	MO00054	06-30-25

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-220243-1
Project/Site: Federal CCR Wells

Laboratory: Eurofins St. Louis (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
North Carolina (DW)	State	29700	07-31-25
North Dakota	State	R-207	06-30-25
Oklahoma	NELAP	9997	08-31-25
Oregon	NELAP	4157	09-01-25
Pennsylvania	NELAP	68-00540	02-28-26
South Carolina	State	85002	06-30-25
Texas	NELAP	T104704193	07-31-25
US Fish & Wildlife	US Federal Programs	058448	07-31-25
USDA	US Federal Programs	525-23-138-94730	05-18-26
Utah	NELAP	MO00054	07-31-25
Virginia	NELAP	460230	06-14-25
Washington	State	C592	08-30-25
West Virginia DEP	State	381	10-31-25

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins
Environment Testing

Client Information	Sampler: Bobby Cato	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s):	COC No.: 240-111832-39818.1
Client Contact: Taylor Huffman	Phone: 740-373-4308	E-Mail: roxanne.cisneros@et.eurofinsus.com	State of Origin:	Page: Page 1 of 8
Company: Lightstone Generation Gavin Power LLC	PWSID			Job #:
Address: 7397 OH-7	Due Date Requested:			
City: Cheshire	TAT Requested (days):			
State, Zip: OH, 45620	Compliance Project: Δ Yes Δ No			
Phone: 740-925-3171(Tel)	PO #: 2935505			
Email: taylor.huffman@lightstonegen.com	WO #:			
Project Name: Gavin CCR	Project #: 24019633			
Site: Gavin	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wastewater, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B, 6020, 7470A	2540C_Calcd - TDS	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	300.0_28D - Chloride, Fluoride & Sulfate	2320B - (MOD) Alkalinity	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	N	D	N	N		
2022-06-F-20250307-01	3-7-25	1340	G	Water			1	1	2	1	1		
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									

240-220243 COC

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	Bobby Cato	3-11-25/0950	Eagon		3/11/25 2588	WCPort
2		3/11/25 16:12	LS		3-12-25 800	EC
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins – Cleveland Sample Receipt Form/Narrative Login # :
Barberton Facility

Client Lightstone Cavin Site Name

Cooler unpacked by:

Cooler Received on 3-12-25 Opened on 3-12-25

FedEx. 1st Grd Exp UPS FAS (Waypoint) Client Drop Off Eurofins Courier Other

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

Eurofins Cooler # EC 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 # 13 (CF 0.0 °C) Observed Cooler Temp. 3.7 °C Corrected Cooler Temp. 3.7 °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	(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# HC448976
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.

3/12/2025

Login Container Summary Report

240-220243

4/9/2025

Temperature readings. _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
2022-06-F-20250307-01	240-220243-A-1	Plastic 60 mL - unpreserved				
2022-06-F-20250307-01	240-220243-B-1	Plastic 60 mL - unpreserved				
2022-06-F-20250307-01	240-220243-C-1	Plastic 500ml - unpreserved				
2022-06-F-20250307-01	240-220243-D-1	Plastic 500ml - with Nitric Acid	<2			
2022-06-F-20250307-01	240-220243-E-1	Plastic 1 liter - Nitric Acid	<2			
2022-06-F-20250307-01	240-220243-F-1	Plastic 1 liter - Nitric Acid	<2			

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180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s): N/A	COC No: 240-199715.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: roxanne.cisneros@et.eurofinsus.com	State of Origin: Ohio	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): N/A		Job #: 240-220243-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 3/25/2025			Preservation Codes: -
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Federal GWM Wells	Project #: 24019633			
Site: N/A	SSOW#: N/A			Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9320_Ra228/PrecSep_0 Radium-228 (GFPC)	9315_Ra226/PrecSep_21 Radium-226 (GFPC)	Ra226Ra228_GFPC/ Combined Radium-226 and Radium-228	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
2022-06-F-20250307-01 (240-220243-1)	3/7/25	13:40 Eastern	G	Water			X	X	X	2	

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

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

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
VMartin	3/12/25	EVC	Cheyenne Forrest	0830 MAR 13 2025	
Relinquished by:	Date/Time:	Company	Received by: Cheyenne Forrest	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:

Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-220243-1

Login Number: 220243

List Source: Eurofins Cleveland

List Number: 1

Creator: Smith, Martin J

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

Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-220243-1

Login Number: 220243
List Number: 2
Creator: Forrest, Cheyenne L

List Source: Eurofins St. Louis
List Creation: 03/13/25 11:40 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?	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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620

Generated 4/16/2025 3:31:33 PM

JOB DESCRIPTION

Federal CCR Wells

JOB NUMBER

240-220484-1

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

myEOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization

Roxanne Cisneros

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Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(330)497-9396

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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-220484-1
Project/Site: Federal CCR Wells

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.
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
F1	MS and/or MSD recovery exceeds control limits.

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: 240-220484-1 — Eurofins Cleveland

Job Narrative
240-220484-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 3/15/2025 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 6 coolers at receipt time were 2.3°C, 3.4°C, 4.1°C, 4.3°C, 11.3°C and 12.4°C.

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

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

Gas Flow Proportional Counter
Method 9320_Ra228: Radium-228 Prep Batch 160-708479:
The detection goal was not met for the following sample due to the reduction of sample size required by the presence of matrix interferences (discoloration noted by the prep analyst): 2016-05-F-20250312-01 (240-220484-1). Analytical results are reported with the detection limit achieved.

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

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

Method Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-220484-1

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CLE
6020B	Metals (ICP/MS)	SW846	EET CLE
7470A	Mercury (CVAA)	SW846	EET CLE
2320 B-2021	Alkalinity	SM	EET CLE
2540 C-2020	Solids, Total Dissolved (TDS)	SM	EET CLE
300.0	Anions, Ion Chromatography	EPA	EET CLE
9315	Radium 226 by GFPC	SW846	EET SL
9320	Radium-228 (GFPC)	SW846	EET SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	EET SL
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CLE
7470A	Preparation, Mercury	SW846	EET CLE
PrecSep_0	Preparation, Precipitate Separation	None	EET SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	EET SL

Protocol References:

EPA = US Environmental Protection Agency
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:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396
EET SL = Eurofins St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-220484-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-220484-1	2016-05-F-20250312-01	Water	03/12/25 14:25	03/15/25 08:00
240-220484-2	96152-F-20250313-01	Water	03/13/25 11:10	03/15/25 08:00
240-220484-3	DUP-003-F-20250313-01	Water	03/13/25 00:00	03/15/25 08:00
240-220484-4	MW-20-F-20250313-01	Water	03/13/25 14:26	03/15/25 08:00

Detection Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-220484-1

Client Sample ID: 2016-05-F-20250312-01 — Lab Sample ID: 240-220484-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	90	J	100	57	ug/L	1		6010D	Total Recoverable
Arsenic	2.9	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	48		5.0	0.77	ug/L	1		6020B	Total Recoverable
Calcium	65000		1000	250	ug/L	1		6020B	Total Recoverable
Cobalt	0.82	J	1.0	0.086	ug/L	1		6020B	Total Recoverable
Lead	1.8		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	12		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	25000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	2400		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	62000		1000	880	ug/L	1		6020B	Total Recoverable
Total Alkalinity	230		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	230		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	460		10	7.8	mg/L	1		2540 C-2020	Total/NA
Chloride	6.3		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.19		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	160		1.0	0.35	mg/L	1		300.0	Total/NA

Client Sample ID: 96152-F-20250313-01 — Lab Sample ID: 240-220484-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	450		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	7.9		5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	810		5.0	0.77	ug/L	1		6020B	Total Recoverable
Calcium	46000		1000	250	ug/L	1		6020B	Total Recoverable
Cobalt	2.2		1.0	0.086	ug/L	1		6020B	Total Recoverable
Lithium	86		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	16000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	3.9	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	8700		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	2200000		5000	4400	ug/L	5		6020B	Total Recoverable
Total Alkalinity	500		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	500		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	5600		100	78	mg/L	1		2540 C-2020	Total/NA
Chloride	3700		50	6.4	mg/L	50		300.0	Total/NA
Fluoride	0.89		0.25	0.12	mg/L	5		300.0	Total/NA
Sulfate	57		5.0	1.7	mg/L	5		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland

Detection Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-220484-1

Client Sample ID: DUP-003-F-20250313-01 — Lab Sample ID: 240-220484-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	450		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	8.0		5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	790		5.0	0.77	ug/L	1		6020B	Total Recoverable
Calcium	46000		1000	250	ug/L	1		6020B	Total Recoverable
Cobalt	2.2		1.0	0.086	ug/L	1		6020B	Total Recoverable
Lithium	84		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	16000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	3.9	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	8700		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	2200000		5000	4400	ug/L	5		6020B	Total Recoverable
Total Alkalinity	500		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	500		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	5700		100	78	mg/L	1		2540 C-2020	Total/NA
Chloride	3600		50	6.4	mg/L	50		300.0	Total/NA
Fluoride	0.85		0.25	0.12	mg/L	5		300.0	Total/NA
Sulfate	56		5.0	1.7	mg/L	5		300.0	Total/NA

Client Sample ID: MW-20-F-20250313-01 — Lab Sample ID: 240-220484-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	160		100	57	ug/L	1		6010D	Total Recoverable
Barium	16		5.0	0.77	ug/L	1		6020B	Total Recoverable
Calcium	460000		1000	250	ug/L	1		6020B	Total Recoverable
Cobalt	190		1.0	0.086	ug/L	1		6020B	Total Recoverable
Lithium	180		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	110000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	5100		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	23000		1000	880	ug/L	1		6020B	Total Recoverable
Total Alkalinity	170		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	170		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	2300		20	16	mg/L	1		2540 C-2020	Total/NA
Chloride	1.6		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	1.3		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	1500	F1	10	3.5	mg/L	10		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-220484-1

Client Sample ID: 2016-05-F-20250312-01

Date Collected: 03/12/25 14:25
Date Received: 03/15/25 08:00

Lab Sample ID: 240-220484-1

Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**90**	**J**	100	57	ug/L		03/17/25 14:00	03/21/25 16:03	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		03/17/25 14:00	03/18/25 12:02	1
Arsenic	**2.9**	**J**	5.0	0.75	ug/L		03/17/25 14:00	03/18/25 12:02	1
Barium	**48**		5.0	0.77	ug/L		03/17/25 14:00	03/18/25 12:02	1
Beryllium	ND		1.0	0.27	ug/L		03/17/25 14:00	03/18/25 12:02	1
Cadmium	ND		1.0	0.077	ug/L		03/17/25 14:00	03/18/25 12:02	1
Calcium	**65000**		1000	250	ug/L		03/17/25 14:00	03/18/25 12:02	1
Chromium	ND		5.0	1.2	ug/L		03/17/25 14:00	03/18/25 12:02	1
Cobalt	**0.82**	**J**	1.0	0.086	ug/L		03/17/25 14:00	03/18/25 12:02	1
Lead	**1.8**		1.0	0.45	ug/L		03/17/25 14:00	03/18/25 12:02	1
Lithium	**12**		8.0	3.4	ug/L		03/17/25 14:00	03/18/25 12:02	1
Magnesium	**25000**		1000	61	ug/L		03/17/25 14:00	03/18/25 12:02	1
Molybdenum	ND		5.0	1.1	ug/L		03/17/25 14:00	03/18/25 12:02	1
Potassium	**2400**		1000	220	ug/L		03/17/25 14:00	03/18/25 12:02	1
Selenium	ND		5.0	0.89	ug/L		03/17/25 14:00	03/18/25 12:02	1
Sodium	**62000**		1000	880	ug/L		03/17/25 14:00	03/18/25 12:02	1
Thallium	ND		1.0	0.51	ug/L		03/17/25 14:00	03/18/25 12:02	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		03/17/25 14:00	03/18/25 16:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	**230**		5.0	2.6	mg/L			03/20/25 17:18	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**230**		5.0	2.6	mg/L			03/20/25 17:18	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			03/20/25 17:18	1
Total Dissolved Solids (SM 2540 C-2020)	**460**		10	7.8	mg/L			03/18/25 15:12	1
Chloride (EPA 300.0)	**6.3**		1.0	0.13	mg/L			03/24/25 17:34	1
Fluoride (EPA 300.0)	**0.19**		0.050	0.024	mg/L			03/24/25 17:34	1
Sulfate (EPA 300.0)	**160**		1.0	0.35	mg/L			03/24/25 17:34	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0488	U	0.173	0.173	1.00	0.442	pCi/L	03/19/25 08:15	04/15/25 21:21	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.5*		*30 - 110*	*03/19/25 08:15*	*04/15/25 21:21*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.447	U G	0.610	0.612	1.00	1.03	pCi/L	03/19/25 08:19	04/15/25 14:33	1

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-220484-1

Client Sample ID: 2016-05-F-20250312-01

Date Collected: 03/12/25 14:25
Date Received: 03/15/25 08:00

Lab Sample ID: 240-220484-1

Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.5*		*30 - 110*	*03/19/25 08:19*	*04/15/25 14:33*	*1*
Y Carrier	*72.9*		*30 - 110*	*03/19/25 08:19*	*04/15/25 14:33*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.398	U	0.634	0.636	5.00	1.03	pCi/L		04/14/25 15:57	1

Client Sample ID: 96152-F-20250313-01

Date Collected: 03/13/25 11:10
Date Received: 03/15/25 08:00

Lab Sample ID: 240-220484-2

Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**450**		100	57	ug/L		03/17/25 14:00	03/21/25 16:07	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		03/17/25 14:00	03/18/25 12:05	1
Arsenic	**7.9**		5.0	0.75	ug/L		03/17/25 14:00	03/18/25 12:05	1
Barium	**810**		5.0	0.77	ug/L		03/17/25 14:00	03/18/25 12:05	1
Beryllium	ND		1.0	0.27	ug/L		03/17/25 14:00	03/18/25 12:05	1
Cadmium	ND		1.0	0.077	ug/L		03/17/25 14:00	03/18/25 12:05	1
Calcium	**46000**		1000	250	ug/L		03/17/25 14:00	03/18/25 12:05	1
Chromium	ND		5.0	1.2	ug/L		03/17/25 14:00	03/18/25 12:05	1
Cobalt	**2.2**		1.0	0.086	ug/L		03/17/25 14:00	03/18/25 12:05	1
Lead	ND		1.0	0.45	ug/L		03/17/25 14:00	03/18/25 12:05	1
Lithium	**86**		8.0	3.4	ug/L		03/17/25 14:00	03/18/25 12:05	1
Magnesium	**16000**		1000	61	ug/L		03/17/25 14:00	03/18/25 12:05	1
Molybdenum	**3.9**	**J**	5.0	1.1	ug/L		03/17/25 14:00	03/18/25 12:05	1
Potassium	**8700**		1000	220	ug/L		03/17/25 14:00	03/18/25 12:05	1
Selenium	ND		5.0	0.89	ug/L		03/17/25 14:00	03/18/25 12:05	1
Sodium	**2200000**		5000	4400	ug/L		03/17/25 14:00	03/19/25 11:25	5
Thallium	ND		1.0	0.51	ug/L		03/17/25 14:00	03/18/25 12:05	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		03/17/25 14:00	03/18/25 16:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	**500**		5.0	2.6	mg/L			03/20/25 17:35	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**500**		5.0	2.6	mg/L			03/20/25 17:35	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			03/20/25 17:35	1
Total Dissolved Solids (SM 2540 C-2020)	**5600**		100	78	mg/L			03/19/25 10:45	1
Chloride (EPA 300.0)	**3700**		50	6.4	mg/L			03/24/25 18:10	50
Fluoride (EPA 300.0)	**0.89**		0.25	0.12	mg/L			03/24/25 18:01	5
Sulfate (EPA 300.0)	**57**		5.0	1.7	mg/L			03/24/25 18:01	5

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**1.43**		0.385	0.406	1.00	0.319	pCi/L	03/19/25 08:15	04/15/25 21:21	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.3*		*30 - 110*	*03/19/25 08:15*	*04/15/25 21:21*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**2.53**		0.629	0.670	1.00	0.659	pCi/L	03/19/25 08:19	04/15/25 14:33	1

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-220484-1

Client Sample ID: 96152-F-20250313-01
Date Collected: 03/13/25 11:10
Date Received: 03/15/25 08:00

Lab Sample ID: 240-220484-2
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.3*		*30 - 110*	*03/19/25 08:19*	*04/15/25 14:33*	*1*
Y Carrier	*69.5*		*30 - 110*	*03/19/25 08:19*	*04/15/25 14:33*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**3.96**		0.737	0.783	5.00	0.659	pCi/L		04/14/25 15:57	1

Client Sample ID: DUP-003-F-20250313-01

Date Collected: 03/13/25 00:00
Date Received: 03/15/25 08:00

Lab Sample ID: 240-220484-3

Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**450**		100	57	ug/L		03/17/25 14:00	03/21/25 16:12	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		03/17/25 14:00	03/18/25 12:29	1
Arsenic	**8.0**		5.0	0.75	ug/L		03/17/25 14:00	03/18/25 12:29	1
Barium	**790**		5.0	0.77	ug/L		03/17/25 14:00	03/18/25 12:29	1
Beryllium	ND		1.0	0.27	ug/L		03/17/25 14:00	03/18/25 12:29	1
Cadmium	ND		1.0	0.077	ug/L		03/17/25 14:00	03/18/25 12:29	1
Calcium	**46000**		1000	250	ug/L		03/17/25 14:00	03/18/25 12:29	1
Chromium	ND		5.0	1.2	ug/L		03/17/25 14:00	03/18/25 12:29	1
Cobalt	**2.2**		1.0	0.086	ug/L		03/17/25 14:00	03/18/25 12:29	1
Lead	ND		1.0	0.45	ug/L		03/17/25 14:00	03/18/25 12:29	1
Lithium	**84**		8.0	3.4	ug/L		03/17/25 14:00	03/18/25 12:29	1
Magnesium	**16000**		1000	61	ug/L		03/17/25 14:00	03/18/25 12:29	1
Molybdenum	**3.9**	**J**	5.0	1.1	ug/L		03/17/25 14:00	03/18/25 12:29	1
Potassium	**8700**		1000	220	ug/L		03/17/25 14:00	03/18/25 12:29	1
Selenium	ND		5.0	0.89	ug/L		03/17/25 14:00	03/18/25 12:29	1
Sodium	**2200000**		5000	4400	ug/L		03/17/25 14:00	03/19/25 11:28	5
Thallium	ND		1.0	0.51	ug/L		03/17/25 14:00	03/18/25 12:29	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		03/17/25 14:00	03/18/25 16:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	**500**		5.0	2.6	mg/L			03/20/25 17:42	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**500**		5.0	2.6	mg/L			03/20/25 17:42	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			03/20/25 17:42	1
Total Dissolved Solids (SM 2540 C-2020)	**5700**		100	78	mg/L			03/19/25 10:45	1
Chloride (EPA 300.0)	**3600**		50	6.4	mg/L			03/24/25 18:29	50
Fluoride (EPA 300.0)	**0.85**		0.25	0.12	mg/L			03/24/25 18:20	5
Sulfate (EPA 300.0)	**56**		5.0	1.7	mg/L			03/24/25 18:20	5

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**1.15**		0.336	0.352	1.00	0.287	pCi/L	03/19/25 08:15	04/15/25 21:21	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*95.3*		*30 - 110*	*03/19/25 08:15*	*04/15/25 21:21*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**1.89**		0.554	0.581	1.00	0.651	pCi/L	03/19/25 08:19	04/15/25 14:33	1

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-220484-1

Client Sample ID: DUP-003-F-20250313-01

Date Collected: 03/13/25 00:00
Date Received: 03/15/25 08:00

Lab Sample ID: 240-220484-3

Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*95.3*		*30 - 110*	*03/19/25 08:19*	*04/15/25 14:33*	*1*
Y Carrier	*73.6*		*30 - 110*	*03/19/25 08:19*	*04/15/25 14:33*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**3.04**		0.648	0.679	5.00	0.651	pCi/L		04/14/25 15:57	1

Client Sample ID: MW-20-F-20250313-01

Date Collected: 03/13/25 14:26
Date Received: 03/15/25 08:00

Lab Sample ID: 240-220484-4

Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**160**		100	57	ug/L		03/17/25 14:00	03/21/25 14:55	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		03/17/25 14:00	03/18/25 11:40	1
Arsenic	ND		5.0	0.75	ug/L		03/17/25 14:00	03/18/25 11:40	1
Barium	**16**		5.0	0.77	ug/L		03/17/25 14:00	03/18/25 11:40	1
Beryllium	ND		1.0	0.27	ug/L		03/17/25 14:00	03/18/25 11:40	1
Cadmium	ND		1.0	0.077	ug/L		03/17/25 14:00	03/18/25 11:40	1
Calcium	**460000**		1000	250	ug/L		03/17/25 14:00	03/18/25 11:40	1
Chromium	ND		5.0	1.2	ug/L		03/17/25 14:00	03/18/25 11:40	1
Cobalt	**190**		1.0	0.086	ug/L		03/17/25 14:00	03/18/25 11:40	1
Lead	ND		1.0	0.45	ug/L		03/17/25 14:00	03/18/25 11:40	1
Lithium	**180**		8.0	3.4	ug/L		03/17/25 14:00	03/18/25 11:40	1
Magnesium	**110000**		1000	61	ug/L		03/17/25 14:00	03/18/25 11:40	1
Molybdenum	ND		5.0	1.1	ug/L		03/17/25 14:00	03/18/25 11:40	1
Potassium	**5100**		1000	220	ug/L		03/17/25 14:00	03/18/25 11:40	1
Selenium	ND		5.0	0.89	ug/L		03/17/25 14:00	03/18/25 11:40	1
Sodium	**23000**		1000	880	ug/L		03/17/25 14:00	03/18/25 11:40	1
Thallium	ND		1.0	0.51	ug/L		03/17/25 14:00	03/18/25 11:40	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		03/17/25 14:00	03/18/25 11:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	**170**		5.0	2.6	mg/L			03/20/25 17:24	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**170**		5.0	2.6	mg/L			03/20/25 17:24	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			03/20/25 17:24	1
Total Dissolved Solids (SM 2540 C-2020)	**2300**		20	16	mg/L			03/20/25 08:32	1
Chloride (EPA 300.0)	**1.6**		1.0	0.13	mg/L			03/24/25 16:29	1
Fluoride (EPA 300.0)	**1.3**		0.050	0.024	mg/L			03/24/25 16:29	1
Sulfate (EPA 300.0)	**1500**	**F1**	10	3.5	mg/L			03/24/25 16:57	10

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.238	U	0.187	0.189	1.00	0.267	pCi/L	03/19/25 08:15	04/15/25 21:21	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*95.1*		*30 - 110*	*03/19/25 08:15*	*04/15/25 21:21*	*1*

Method: SW846 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	0.339	0.340	1.00	0.548	pCi/L	03/19/25 08:19	04/15/25 14:33	1

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-220484-1

Client Sample ID: MW-20-F-20250313-01
Date Collected: 03/13/25 14:26
Date Received: 03/15/25 08:00

Lab Sample ID: 240-220484-4
Matrix: Water

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	95.1		30 - 110	03/19/25 08:19	04/15/25 14:33	1
Y Carrier	72.9		30 - 110	03/19/25 08:19	04/15/25 14:33	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.563		0.387	0.389	5.00	0.548	pCi/L		04/14/25 15:57	1

Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-220484-1
Project/Site: Federal CCR Wells

Method: 9315 - Radium 226 by GFPC

Matrix: Water **Prep Type: Total/NA**

		Percent Yield (Acceptance Limits)
		Ba
Lab Sample ID	Client Sample ID	(30-110)
240-220484-1	2016-05-F-20250312-01	87.5
240-220484-2	96152-F-20250313-01	88.3
240-220484-3	DUP-003-F-20250313-01	95.3
240-220484-4	MW-20-F-20250313-01	95.1
240-220484-4 MS	MW-20-F-20250313-MS-01	88.0
240-220484-4 MSD	MW-20-F-20250313-MSD-01	90.6
LCS 160-708478/2-A	Lab Control Sample	86.7
MB 160-708478/1-A	Method Blank	90.4

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	(30-110)	(30-110)
240-220484-1	2016-05-F-20250312-01	87.5	72.9
240-220484-2	96152-F-20250313-01	88.3	69.5
240-220484-3	DUP-003-F-20250313-01	95.3	73.6
240-220484-4	MW-20-F-20250313-01	95.1	72.9
240-220484-4 MS	MW-20-F-20250313-MS-01	88.0	72.1
240-220484-4 MSD	MW-20-F-20250313-MSD-01	90.6	74.8
LCS 160-708479/2-A	Lab Control Sample	86.7	79.3
MB 160-708479/1-A	Method Blank	90.4	74.0

Tracer/Carrier Legend

Ba = Ba Carrier
Y = Y Carrier

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-648445/1-A
Matrix: Water
Analysis Batch: 649187

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 648445

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		03/17/25 14:00	03/21/25 14:37	1

Lab Sample ID: LCS 240-648445/2-A
Matrix: Water
Analysis Batch: 649187

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 648445

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1000	981		ug/L		98	80 - 120

Lab Sample ID: 240-220484-4 MS
Matrix: Water
Analysis Batch: 649187

Client Sample ID: MW-20-F-20250313-MS-01
Prep Type: Total Recoverable
Prep Batch: 648445

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	160		1000	1180		ug/L		102	75 - 125

Lab Sample ID: 240-220484-4 MSD
Matrix: Water
Analysis Batch: 649187

Client Sample ID: MW-20-F-20250313-MSD-01
Prep Type: Total Recoverable
Prep Batch: 648445

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	160		1000	1210		ug/L		105	75 - 125	2	20

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-648445/1-A
Matrix: Water
Analysis Batch: 648654

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 648445

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		03/17/25 14:00	03/18/25 11:29	1
Arsenic	ND		5.0	0.75	ug/L		03/17/25 14:00	03/18/25 11:29	1
Barium	ND		5.0	0.77	ug/L		03/17/25 14:00	03/18/25 11:29	1
Beryllium	ND		1.0	0.27	ug/L		03/17/25 14:00	03/18/25 11:29	1
Cadmium	ND		1.0	0.077	ug/L		03/17/25 14:00	03/18/25 11:29	1
Calcium	ND		1000	250	ug/L		03/17/25 14:00	03/18/25 11:29	1
Chromium	ND		5.0	1.2	ug/L		03/17/25 14:00	03/18/25 11:29	1
Cobalt	ND		1.0	0.086	ug/L		03/17/25 14:00	03/18/25 11:29	1
Lead	ND		1.0	0.45	ug/L		03/17/25 14:00	03/18/25 11:29	1
Lithium	ND		8.0	3.4	ug/L		03/17/25 14:00	03/18/25 11:29	1
Magnesium	ND		1000	61	ug/L		03/17/25 14:00	03/18/25 11:29	1
Molybdenum	ND		5.0	1.1	ug/L		03/17/25 14:00	03/18/25 11:29	1
Potassium	ND		1000	220	ug/L		03/17/25 14:00	03/18/25 11:29	1
Selenium	ND		5.0	0.89	ug/L		03/17/25 14:00	03/18/25 11:29	1
Sodium	ND		1000	880	ug/L		03/17/25 14:00	03/18/25 11:29	1
Thallium	ND		1.0	0.51	ug/L		03/17/25 14:00	03/18/25 11:29	1

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

Lab Sample ID: LCS 240-648445/3-A
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total Recoverable
Analysis Batch: 648654
Prep Batch: 648445

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Antimony			100	101		ug/L		101	80 - 120		
Arsenic			1000	970		ug/L		97	80 - 120		
Barium			1000	966		ug/L		97	80 - 120		
Beryllium			500	480		ug/L		96	80 - 120		
Cadmium			500	479		ug/L		96	80 - 120		
Calcium			25000	24300		ug/L		97	80 - 120		
Chromium			500	488		ug/L		98	80 - 120		
Cobalt			500	475		ug/L		95	80 - 120		
Lead			500	516		ug/L		103	80 - 120		
Lithium			500	487		ug/L		97	80 - 120		
Magnesium			25000	24900		ug/L		99	80 - 120		
Molybdenum			500	485		ug/L		97	80 - 120		
Potassium			25000	25500		ug/L		102	80 - 120		
Selenium			1000	963		ug/L		96	80 - 120		
Sodium			25000	24900		ug/L		100	80 - 120		
Thallium			1000	1090		ug/L		109	80 - 120		

Lab Sample ID: 240-220484-4 MS
Client Sample ID: MW-20-F-20250313-MS-01
Matrix: Water
Prep Type: Total Recoverable
Analysis Batch: 648654
Prep Batch: 648445

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Antimony	ND		100	103		ug/L		103	80 - 120		
Arsenic	ND		1000	958		ug/L		96	80 - 120		
Barium	16		1000	966		ug/L		95	80 - 120		
Beryllium	ND		500	441		ug/L		88	80 - 120		
Cadmium	ND		500	464		ug/L		93	80 - 120		
Calcium	460000		25000	477000	4	ug/L		83	80 - 120		
Chromium	ND		500	479		ug/L		96	80 - 120		
Cobalt	190		500	677		ug/L		98	80 - 120		
Lead	ND		500	499		ug/L		100	80 - 120		
Lithium	180		500	671		ug/L		98	80 - 120		
Magnesium	110000		25000	129000	4	ug/L		93	80 - 120		
Molybdenum	ND		500	480		ug/L		96	80 - 120		
Potassium	5100		25000	30500		ug/L		102	80 - 120		
Selenium	ND		1000	927		ug/L		93	80 - 120		
Sodium	23000		25000	47000		ug/L		96	80 - 120		
Thallium	ND		1000	1070		ug/L		107	80 - 120		

Lab Sample ID: 240-220484-4 MSD
Client Sample ID: MW-20-F-20250313-MSD-01
Matrix: Water
Prep Type: Total Recoverable
Analysis Batch: 648654
Prep Batch: 648445

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	ND		100	100		ug/L		100	80 - 120	2	20
Arsenic	ND		1000	1010		ug/L		101	80 - 120	5	20
Barium	16		1000	1010		ug/L		99	80 - 120	4	20
Beryllium	ND		500	461		ug/L		92	80 - 120	4	20
Cadmium	ND		500	485		ug/L		97	80 - 120	4	20

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

Lab Sample ID: 240-220484-4 MSD — **Client Sample ID: MW-20-F-20250313-MSD-01**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 648654 — **Prep Batch: 648445**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	460000		25000	488000	4	ug/L		125	80 - 120	2	20
Chromium	ND		500	500		ug/L		100	80 - 120	4	20
Cobalt	190		500	703		ug/L		103	80 - 120	4	20
Lead	ND		500	530		ug/L		106	80 - 120	6	20
Lithium	180		500	691		ug/L		102	80 - 120	3	20
Magnesium	110000		25000	131000	4	ug/L		102	80 - 120	2	20
Molybdenum	ND		500	508		ug/L		102	80 - 120	6	20
Potassium	5100		25000	31600		ug/L		106	80 - 120	3	20
Selenium	ND		1000	956		ug/L		96	80 - 120	3	20
Sodium	23000		25000	47900		ug/L		100	80 - 120	2	20
Thallium	ND		1000	1130		ug/L		113	80 - 120	6	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-648447/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 648664 — **Prep Batch: 648447**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		03/17/25 14:00	03/18/25 11:44	1

Lab Sample ID: MB 240-648447/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 648753 — **Prep Batch: 648447**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		03/17/25 14:00	03/18/25 15:34	1

Lab Sample ID: LCS 240-648447/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 648664 — **Prep Batch: 648447**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.34		ug/L		107	80 - 120

Lab Sample ID: LCS 240-648447/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 648753 — **Prep Batch: 648447**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.36		ug/L		107	80 - 120

Lab Sample ID: 240-220484-4 MS — **Client Sample ID: MW-20-F-20250313-MS-01**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 648664 — **Prep Batch: 648447**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		1.00	1.06		ug/L		106	80 - 120

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: 240-220484-4 MSD
Matrix: Water
Analysis Batch: 648664

Client Sample ID: MW-20-F-20250313-MSD-01
Prep Type: Total/NA
Prep Batch: 648447

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		1.00	1.03		ug/L		103	80 - 120	3	20

Method: 2320 B-2021 - Alkalinity

Lab Sample ID: MB 240-649077/30
Matrix: Water
Analysis Batch: 649077

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	ND		5.0	2.6	mg/L			03/20/25 13:45	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/20/25 13:45	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/20/25 13:45	1

Lab Sample ID: MB 240-649077/56
Matrix: Water
Analysis Batch: 649077

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	ND		5.0	2.6	mg/L			03/20/25 15:56	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/20/25 15:56	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/20/25 15:56	1

Lab Sample ID: LCS 240-649077/55
Matrix: Water
Analysis Batch: 649077

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	280	269		mg/L		96	86 - 123

Lab Sample ID: 240-220484-4 DU
Matrix: Water
Analysis Batch: 649077

Client Sample ID: MW-20-F-20250313-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity	170		178		mg/L		7	20
Bicarbonate Alkalinity as CaCO3	170		178		mg/L		7	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

Method: 2540 C-2020 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 240-648697/1
Matrix: Water
Analysis Batch: 648697

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	ND		10	7.8	mg/L			03/18/25 15:12	1

Method: 2540 C-2020 - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCS 240-648697/2
Matrix: Water
Analysis Batch: 648697

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			569	540		mg/L		95	80 - 120		

Lab Sample ID: MB 240-648816/1
Matrix: Water
Analysis Batch: 648816

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	ND		10	7.8	mg/L			03/19/25 10:45	1

Lab Sample ID: LCS 240-648816/2
Matrix: Water
Analysis Batch: 648816

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			569	553		mg/L		97	80 - 120		

Lab Sample ID: MB 240-648921/1
Matrix: Water
Analysis Batch: 648921

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	ND		10	7.8	mg/L			03/20/25 08:32	1

Lab Sample ID: LCS 240-648921/2
Matrix: Water
Analysis Batch: 648921

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			569	558		mg/L		98	80 - 120		

Lab Sample ID: 240-220484-4 DU
Matrix: Water
Analysis Batch: 648921

Client Sample ID: MW-20-F-20250313-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	2300			2280		mg/L				0.8	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-649385/3
Matrix: Water
Analysis Batch: 649385

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.13	mg/L			03/24/25 16:11	1
Fluoride	ND		0.050	0.024	mg/L			03/24/25 16:11	1
Sulfate	ND		1.0	0.35	mg/L			03/24/25 16:11	1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 240-649385/4
Matrix: Water
Analysis Batch: 649385

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			50.0	48.2		mg/L		96	90 - 110		
Fluoride			2.50	2.48		mg/L		99	90 - 110		
Sulfate			50.0	47.7		mg/L		95	90 - 110		

Lab Sample ID: 240-220484-4 MS
Matrix: Water
Analysis Batch: 649385

Client Sample ID: MW-20-F-20250313-MS-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	1.6		50.0	53.3		mg/L		103	80 - 120		
Fluoride	1.3		2.50	3.70		mg/L		95	80 - 120		

Lab Sample ID: 240-220484-4 MS
Matrix: Water
Analysis Batch: 649385

Client Sample ID: MW-20-F-20250313-MS-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Sulfate	1500	F1	500	1910	F1	mg/L		79	80 - 120		

Lab Sample ID: 240-220484-4 MSD
Matrix: Water
Analysis Batch: 649385

Client Sample ID: MW-20-F-20250313-MSD-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	1.6		50.0	54.0		mg/L		105	80 - 120	1	15
Fluoride	1.3		2.50	3.72		mg/L		96	80 - 120	0	15

Lab Sample ID: 240-220484-4 MSD
Matrix: Water
Analysis Batch: 649385

Client Sample ID: MW-20-F-20250313-MSD-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfate	1500	F1	500	1900	F1	mg/L		78	80 - 120	0	15

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-708478/1-A
Matrix: Water
Analysis Batch: 712586

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 708478

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.08310	U	0.113	0.113	1.00	0.295	pCi/L	03/19/25 08:15	04/15/25 21:20	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.4*		*30 - 110*	*03/19/25 08:15*	*04/15/25 21:20*	*1*

Method: 9315 - Radium 226 by GFPC (Continued)

Lab Sample ID: LCS 160-708478/2-A
Matrix: Water
Analysis Batch: 712586

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 708478

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-226			9.58	9.326		1.25	1.00	0.346	pCi/L	97	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*86.7*		*30 - 110*

Lab Sample ID: 240-220484-4 MS
Matrix: Water
Analysis Batch: 712586

Client Sample ID: MW-20-F-20250313-MS-01
Prep Type: Total/NA
Prep Batch: 708478

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-226	0.238	U	9.52	9.394		1.24	1.00	0.278	pCi/L	96	60 - 140		

Carrier	*MS %Yield*	*MS Qualifier*	*Limits*
Ba Carrier	*88.0*		*30 - 110*

Lab Sample ID: 240-220484-4 MSD
Matrix: Water
Analysis Batch: 712586

Client Sample ID: MW-20-F-20250313-MSD-01
Prep Type: Total/NA
Prep Batch: 708478

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	0.238	U	9.57	8.531		1.15	1.00	0.256	pCi/L	87	60 - 140	0.36	1

Carrier	*MSD %Yield*	*MSD Qualifier*	*Limits*
Ba Carrier	*90.6*		*30 - 110*

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-708479/1-A
Matrix: Water
Analysis Batch: 712607

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 708479

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.03724	U	0.329	0.329	1.00	0.606	pCi/L	03/19/25 08:19	04/15/25 14:32	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.4*		*30 - 110*	*03/19/25 08:19*	*04/15/25 14:32*	*1*
Y Carrier	*74.0*		*30 - 110*	*03/19/25 08:19*	*04/15/25 14:32*	*1*

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

Lab Sample ID: LCS 160-708479/2-A
Matrix: Water
Analysis Batch: 712607

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 708479

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228			9.54	10.59		1.44	1.00	0.564	pCi/L	111	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*86.7*		*30 - 110*
Y Carrier	*79.3*		*30 - 110*

Lab Sample ID: 240-220484-4 MS
Matrix: Water
Analysis Batch: 712607

Client Sample ID: MW-20-F-20250313-MS-01
Prep Type: Total/NA
Prep Batch: 708479

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228	0.325	U	9.49	12.23		1.64	1.00	0.621	pCi/L	126	60 - 140		

Carrier	*MS %Yield*	*MS Qualifier*	*Limits*
Ba Carrier	*88.0*		*30 - 110*
Y Carrier	*72.1*		*30 - 110*

Lab Sample ID: 240-220484-4 MSD
Matrix: Water
Analysis Batch: 712607

Client Sample ID: MW-20-F-20250313-MSD-01
Prep Type: Total/NA
Prep Batch: 708479

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	0.325	U	9.54	13.10		1.69	1.00	0.634	pCi/L	134	60 - 140	0.26	1

Carrier	*MSD %Yield*	*MSD Qualifier*	*Limits*
Ba Carrier	*90.6*		*30 - 110*
Y Carrier	*74.8*		*30 - 110*

Metals

Prep Batch: 648445

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220484-1	2016-05-F-20250312-01	Total Recoverable	Water	3005A	
240-220484-2	96152-F-20250313-01	Total Recoverable	Water	3005A	
240-220484-3	DUP-003-F-20250313-01	Total Recoverable	Water	3005A	
240-220484-4	MW-20-F-20250313-01	Total Recoverable	Water	3005A	
MB 240-648445/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-648445/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-648445/3-A	Lab Control Sample	Total Recoverable	Water	3005A	
240-220484-4 MS	MW-20-F-20250313-MS-01	Total Recoverable	Water	3005A	
240-220484-4 MS	MW-20-F-20250313-MS-01	Total Recoverable	Water	3005A	
240-220484-4 MSD	MW-20-F-20250313-MSD-01	Total Recoverable	Water	3005A	
240-220484-4 MSD	MW-20-F-20250313-MSD-01	Total Recoverable	Water	3005A	

Prep Batch: 648447

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220484-1	2016-05-F-20250312-01	Total/NA	Water	7470A	
240-220484-2	96152-F-20250313-01	Total/NA	Water	7470A	
240-220484-3	DUP-003-F-20250313-01	Total/NA	Water	7470A	
240-220484-4	MW-20-F-20250313-01	Total/NA	Water	7470A	
MB 240-648447/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-648447/2-A	Lab Control Sample	Total/NA	Water	7470A	
240-220484-4 MS	MW-20-F-20250313-MS-01	Total/NA	Water	7470A	
240-220484-4 MSD	MW-20-F-20250313-MSD-01	Total/NA	Water	7470A	

Analysis Batch: 648654

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220484-1	2016-05-F-20250312-01	Total Recoverable	Water	6020B	648445
240-220484-2	96152-F-20250313-01	Total Recoverable	Water	6020B	648445
240-220484-3	DUP-003-F-20250313-01	Total Recoverable	Water	6020B	648445
240-220484-4	MW-20-F-20250313-01	Total Recoverable	Water	6020B	648445
MB 240-648445/1-A	Method Blank	Total Recoverable	Water	6020B	648445
LCS 240-648445/3-A	Lab Control Sample	Total Recoverable	Water	6020B	648445
240-220484-4 MS	MW-20-F-20250313-MS-01	Total Recoverable	Water	6020B	648445
240-220484-4 MSD	MW-20-F-20250313-MSD-01	Total Recoverable	Water	6020B	648445

Analysis Batch: 648664

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220484-4	MW-20-F-20250313-01	Total/NA	Water	7470A	648447
MB 240-648447/1-A	Method Blank	Total/NA	Water	7470A	648447
LCS 240-648447/2-A	Lab Control Sample	Total/NA	Water	7470A	648447
240-220484-4 MS	MW-20-F-20250313-MS-01	Total/NA	Water	7470A	648447
240-220484-4 MSD	MW-20-F-20250313-MSD-01	Total/NA	Water	7470A	648447

Analysis Batch: 648753

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220484-1	2016-05-F-20250312-01	Total/NA	Water	7470A	648447
240-220484-2	96152-F-20250313-01	Total/NA	Water	7470A	648447
240-220484-3	DUP-003-F-20250313-01	Total/NA	Water	7470A	648447
MB 240-648447/1-A	Method Blank	Total/NA	Water	7470A	648447
LCS 240-648447/2-A	Lab Control Sample	Total/NA	Water	7470A	648447

Metals

Analysis Batch: 648913

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220484-2	96152-F-20250313-01	Total Recoverable	Water	6020B	648445
240-220484-3	DUP-003-F-20250313-01	Total Recoverable	Water	6020B	648445

Analysis Batch: 649187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220484-1	2016-05-F-20250312-01	Total Recoverable	Water	6010D	648445
240-220484-2	96152-F-20250313-01	Total Recoverable	Water	6010D	648445
240-220484-3	DUP-003-F-20250313-01	Total Recoverable	Water	6010D	648445
240-220484-4	MW-20-F-20250313-01	Total Recoverable	Water	6010D	648445
MB 240-648445/1-A	Method Blank	Total Recoverable	Water	6010D	648445
LCS 240-648445/2-A	Lab Control Sample	Total Recoverable	Water	6010D	648445
240-220484-4 MS	MW-20-F-20250313-MS-01	Total Recoverable	Water	6010D	648445
240-220484-4 MSD	MW-20-F-20250313-MSD-01	Total Recoverable	Water	6010D	648445

General Chemistry

Analysis Batch: 648697

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220484-1	2016-05-F-20250312-01	Total/NA	Water	2540 C-2020	
MB 240-648697/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-648697/2	Lab Control Sample	Total/NA	Water	2540 C-2020	

Analysis Batch: 648816

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220484-2	96152-F-20250313-01	Total/NA	Water	2540 C-2020	
240-220484-3	DUP-003-F-20250313-01	Total/NA	Water	2540 C-2020	
MB 240-648816/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-648816/2	Lab Control Sample	Total/NA	Water	2540 C-2020	

Analysis Batch: 648921

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220484-4	MW-20-F-20250313-01	Total/NA	Water	2540 C-2020	
MB 240-648921/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-648921/2	Lab Control Sample	Total/NA	Water	2540 C-2020	
240-220484-4 DU	MW-20-F-20250313-01	Total/NA	Water	2540 C-2020	

Analysis Batch: 649077

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220484-1	2016-05-F-20250312-01	Total/NA	Water	2320 B-2021	
240-220484-2	96152-F-20250313-01	Total/NA	Water	2320 B-2021	
240-220484-3	DUP-003-F-20250313-01	Total/NA	Water	2320 B-2021	
240-220484-4	MW-20-F-20250313-01	Total/NA	Water	2320 B-2021	
MB 240-649077/30	Method Blank	Total/NA	Water	2320 B-2021	
MB 240-649077/56	Method Blank	Total/NA	Water	2320 B-2021	
LCS 240-649077/55	Lab Control Sample	Total/NA	Water	2320 B-2021	
240-220484-4 DU	MW-20-F-20250313-01	Total/NA	Water	2320 B-2021	

Analysis Batch: 649385

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220484-1	2016-05-F-20250312-01	Total/NA	Water	300.0	
240-220484-2	96152-F-20250313-01	Total/NA	Water	300.0	

General Chemistry (Continued)

Analysis Batch: 649385 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220484-2	96152-F-20250313-01	Total/NA	Water	300.0	
240-220484-3	DUP-003-F-20250313-01	Total/NA	Water	300.0	
240-220484-3	DUP-003-F-20250313-01	Total/NA	Water	300.0	
240-220484-4	MW-20-F-20250313-01	Total/NA	Water	300.0	
240-220484-4	MW-20-F-20250313-01	Total/NA	Water	300.0	
MB 240-649385/3	Method Blank	Total/NA	Water	300.0	
LCS 240-649385/4	Lab Control Sample	Total/NA	Water	300.0	
240-220484-4 MS	MW-20-F-20250313-MS-01	Total/NA	Water	300.0	
240-220484-4 MS	MW-20-F-20250313-MS-01	Total/NA	Water	300.0	
240-220484-4 MSD	MW-20-F-20250313-MSD-01	Total/NA	Water	300.0	
240-220484-4 MSD	MW-20-F-20250313-MSD-01	Total/NA	Water	300.0	

Rad

Prep Batch: 708478

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220484-1	2016-05-F-20250312-01	Total/NA	Water	PrecSep-21	
240-220484-2	96152-F-20250313-01	Total/NA	Water	PrecSep-21	
240-220484-3	DUP-003-F-20250313-01	Total/NA	Water	PrecSep-21	
240-220484-4	MW-20-F-20250313-01	Total/NA	Water	PrecSep-21	
MB 160-708478/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-708478/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
240-220484-4 MS	MW-20-F-20250313-MS-01	Total/NA	Water	PrecSep-21	
240-220484-4 MSD	MW-20-F-20250313-MSD-01	Total/NA	Water	PrecSep-21	

Prep Batch: 708479

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220484-1	2016-05-F-20250312-01	Total/NA	Water	PrecSep_0	
240-220484-2	96152-F-20250313-01	Total/NA	Water	PrecSep_0	
240-220484-3	DUP-003-F-20250313-01	Total/NA	Water	PrecSep_0	
240-220484-4	MW-20-F-20250313-01	Total/NA	Water	PrecSep_0	
MB 160-708479/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-708479/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
240-220484-4 MS	MW-20-F-20250313-MS-01	Total/NA	Water	PrecSep_0	
240-220484-4 MSD	MW-20-F-20250313-MSD-01	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-220484-1

Client Sample ID: 2016-05-F-20250312-01

Lab Sample ID: 240-220484-1

Date Collected: 03/12/25 14:25

Matrix: Water

Date Received: 03/15/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			648445	XWS6	EET CLE	03/17/25 14:00
Total Recoverable	Analysis	6010D		1	649187	AJC	EET CLE	03/21/25 16:03
Total Recoverable	Prep	3005A			648445	XWS6	EET CLE	03/17/25 14:00
Total Recoverable	Analysis	6020B		1	648654	RKT	EET CLE	03/18/25 12:02
Total/NA	Prep	7470A			648447	XWS6	EET CLE	03/17/25 14:00
Total/NA	Analysis	7470A		1	648753	GEV	EET CLE	03/18/25 16:09
Total/NA	Analysis	2320 B-2021		1	649077	PQD2	EET CLE	03/20/25 17:18
Total/NA	Analysis	2540 C-2020		1	648697	TAV2	EET CLE	03/18/25 15:12
Total/NA	Analysis	300.0		1	649385	JMR	EET CLE	03/24/25 17:34
Total/NA	Prep	PrecSep-21			708478	BMW	EET SL	03/19/25 08:15
Total/NA	Analysis	9315		1	712586	SWS	EET SL	04/15/25 21:21
Total/NA	Prep	PrecSep_0			708479	BMW	EET SL	03/19/25 08:19
Total/NA	Analysis	9320		1	712607	CMM	EET SL	04/15/25 14:33
Total/NA	Analysis	Ra226_Ra228		1	711957	EMH	EET SL	04/14/25 15:57

Client Sample ID: 96152-F-20250313-01

Lab Sample ID: 240-220484-2

Date Collected: 03/13/25 11:10

Matrix: Water

Date Received: 03/15/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			648445	XWS6	EET CLE	03/17/25 14:00
Total Recoverable	Analysis	6010D		1	649187	AJC	EET CLE	03/21/25 16:07
Total Recoverable	Prep	3005A			648445	XWS6	EET CLE	03/17/25 14:00
Total Recoverable	Analysis	6020B		1	648654	RKT	EET CLE	03/18/25 12:05
Total Recoverable	Prep	3005A			648445	XWS6	EET CLE	03/17/25 14:00
Total Recoverable	Analysis	6020B		5	648913	S4FJ	EET CLE	03/19/25 11:25
Total/NA	Prep	7470A			648447	XWS6	EET CLE	03/17/25 14:00
Total/NA	Analysis	7470A		1	648753	GEV	EET CLE	03/18/25 16:11
Total/NA	Analysis	2320 B-2021		1	649077	PQD2	EET CLE	03/20/25 17:35
Total/NA	Analysis	2540 C-2020		1	648816	PQD2	EET CLE	03/19/25 10:45
Total/NA	Analysis	300.0		5	649385	JMR	EET CLE	03/24/25 18:01
Total/NA	Analysis	300.0		50	649385	JMR	EET CLE	03/24/25 18:10
Total/NA	Prep	PrecSep-21			708478	BMW	EET SL	03/19/25 08:15
Total/NA	Analysis	9315		1	712586	SWS	EET SL	04/15/25 21:21
Total/NA	Prep	PrecSep_0			708479	BMW	EET SL	03/19/25 08:19
Total/NA	Analysis	9320		1	712607	CMM	EET SL	04/15/25 14:33
Total/NA	Analysis	Ra226_Ra228		1	711957	EMH	EET SL	04/14/25 15:57

Client Sample ID: DUP-003-F-20250313-01

Lab Sample ID: 240-220484-3

Date Collected: 03/13/25 00:00

Matrix: Water

Date Received: 03/15/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			648445	XWS6	EET CLE	03/17/25 14:00
Total Recoverable	Analysis	6010D		1	649187	AJC	EET CLE	03/21/25 16:12
Total Recoverable	Prep	3005A			648445	XWS6	EET CLE	03/17/25 14:00
Total Recoverable	Analysis	6020B		1	648654	RKT	EET CLE	03/18/25 12:29
Total Recoverable	Prep	3005A			648445	XWS6	EET CLE	03/17/25 14:00
Total Recoverable	Analysis	6020B		5	648913	S4FJ	EET CLE	03/19/25 11:28
Total/NA	Prep	7470A			648447	XWS6	EET CLE	03/17/25 14:00
Total/NA	Analysis	7470A		1	648753	GEV	EET CLE	03/18/25 16:12
Total/NA	Analysis	2320 B-2021		1	649077	PQD2	EET CLE	03/20/25 17:42
Total/NA	Analysis	2540 C-2020		1	648816	PQD2	EET CLE	03/19/25 10:45
Total/NA	Analysis	300.0		5	649385	JMR	EET CLE	03/24/25 18:20
Total/NA	Analysis	300.0		50	649385	JMR	EET CLE	03/24/25 18:29
Total/NA	Prep	PrecSep-21			708478	BMW	EET SL	03/19/25 08:15
Total/NA	Analysis	9315		1	712586	SWS	EET SL	04/15/25 21:21
Total/NA	Prep	PrecSep_0			708479	BMW	EET SL	03/19/25 08:19
Total/NA	Analysis	9320		1	712607	CMM	EET SL	04/15/25 14:33
Total/NA	Analysis	Ra226_Ra228		1	711957	EMH	EET SL	04/14/25 15:57

Client Sample ID: MW-20-F-20250313-01

Lab Sample ID: 240-220484-4

Date Collected: 03/13/25 14:26

Matrix: Water

Date Received: 03/15/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			648445	XWS6	EET CLE	03/17/25 14:00
Total Recoverable	Analysis	6010D		1	649187	AJC	EET CLE	03/21/25 14:55
Total Recoverable	Prep	3005A			648445	XWS6	EET CLE	03/17/25 14:00
Total Recoverable	Analysis	6020B		1	648654	RKT	EET CLE	03/18/25 11:40
Total/NA	Prep	7470A			648447	XWS6	EET CLE	03/17/25 14:00
Total/NA	Analysis	7470A		1	648664	GEV	EET CLE	03/18/25 11:47
Total/NA	Analysis	2320 B-2021		1	649077	PQD2	EET CLE	03/20/25 17:24
Total/NA	Analysis	2540 C-2020		1	648921	C5SV	EET CLE	03/20/25 08:32
Total/NA	Analysis	300.0		1	649385	JMR	EET CLE	03/24/25 16:29
Total/NA	Analysis	300.0		10	649385	JMR	EET CLE	03/24/25 16:57
Total/NA	Prep	PrecSep-21			708478	BMW	EET SL	03/19/25 08:15
Total/NA	Analysis	9315		1	712586	SWS	EET SL	04/15/25 21:21
Total/NA	Prep	PrecSep_0			708479	BMW	EET SL	03/19/25 08:19
Total/NA	Analysis	9320		1	712607	CMM	EET SL	04/15/25 14:33
Total/NA	Analysis	Ra226_Ra228		1	711957	EMH	EET SL	04/14/25 15:57

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

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

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-220484-1
Project/Site: Federal CCR Wells

Laboratory: Eurofins Cleveland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0806	12-31-26
Georgia	State	4062	02-27-26
Illinois	NELAP	200004	08-31-25
Iowa	State	421	06-01-25
Kansas	NELAP	E-10336	01-31-26
Kentucky (UST)	State	112225	02-28-26
Kentucky (WW)	State	KY98016	12-31-25
Minnesota	NELAP	039-999-348	12-31-25
New Hampshire	NELAP	225024	09-30-25
New Jersey	NELAP	OH001	07-03-25
New York	NELAP	10975	03-31-25
North Dakota	State	R-244	02-27-26
Ohio	State	8303	11-04-25
Ohio VAP	State	ORELAP 4062	02-28-26
Oregon	NELAP	4062	02-27-26
Pennsylvania	NELAP	68-00340	08-31-25
Texas	NELAP	T104704517-22-19	08-31-25
US Fish & Wildlife	US Federal Programs	A26406	02-28-26
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	09-14-25
West Virginia DEP	State	210	12-31-25
Wisconsin	State	399167560	08-31-25

Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-25
ANAB	Dept. of Defense ELAP	L2305	04-06-27
ANAB	Dept. of Energy	L2305.01	04-06-27
ANAB	ISO/IEC 17025	L2305	04-06-27
Arizona	State	AZ0813	12-08-25
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-25
Connecticut	State	PH-0241	03-31-25 *
Florida	NELAP	E87689	06-30-25
HI - RadChem Recognition	State	n/a	06-30-25
Illinois	NELAP	200023	11-30-25
Iowa	State	373	12-01-26
Kansas	NELAP	E-10236	10-31-25
Kentucky (DW)	State	KY90125	12-31-25
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-25
Louisiana (All)	NELAP	106151	06-30-25
Louisiana (DW)	State	LA011	12-31-25
Maryland	State	310	09-30-25
Massachusetts	State	M-MO054	06-30-25
MI - RadChem Recognition	State	9005	06-30-25
Missouri	State	780	06-30-25
Nevada	State	MO00054	07-31-25

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-220484-1
Project/Site: Federal CCR Wells

Laboratory: Eurofins St. Louis (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New Jersey	NELAP	MO002	06-30-25
New Mexico	State	MO00054	06-30-25
New York	NELAP	11616	03-31-26
North Carolina (DW)	State	29700	07-31-25
North Dakota	State	R-207	06-30-25
Oklahoma	NELAP	9997	08-31-25
Oregon	NELAP	4157	09-01-25
Pennsylvania	NELAP	68-00540	02-28-26
South Carolina	State	85002	06-30-25
Texas	NELAP	T104704193	07-31-25
US Fish & Wildlife	US Federal Programs	058448	07-31-25
USDA	US Federal Programs	525-23-138-94730	05-18-26
Utah	NELAP	MO00054	07-31-25
Virginia	NELAP	460230	06-14-25
Washington	State	C592	08-30-25
West Virginia DEP	State	381	10-31-25

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

Client Information
Client Contact: Taylor Huffman
Company: Lightstone Generation Gavin Power LLC
Address: 7397 OH-7
City: Cheshire
State, Zip: OH, 45620
Phone: 740-925-3171(Tel)
Email: taylor.huffman@lightstonegen.com
Project Name: Gavin CCR
Site:

Sampler: Bobby Casto
Phone: 740-373-4308
PWSID

Lab PM: Cisneros, Roxanne
E-Mail: roxanne.cisneros@et.eurofinsus.com
Carrier Tracking No(s):
State of Origin:

Due Date Requested:
TAT Requested (days):
Compliance Project: Δ Yes Δ No
PO #: 2935505
WO #:
Project #: 24019633
SSOW#:

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B, 6020, 7470A	2540C_Calcd - TDS	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	300.0_28D - Chloride, Fluoride & Sulfate	2320B - (MOD) Alkalinity
			Preservation Code:				D	N	D	N	N
2016-05-F-20250312-01	3-12-25	1425	6	Water			1	1	1	1	1
9615Z-F-20250313-01	3-13-25	1110	6	Water			1	1	2	1	1
DUP-003-F-20250313-01	3-13-25	—	6	Water			1	1	2	1	1
MW-20-F-20250313-01	3-13-25	1426	6	Water			1	1	2	1	1
MW-20-F-20250313-MS-01	3-13-25	1426	6	Water			1	1	2	1	1
MW-20-F-20250313-MSD-01	3-13-25	1426	6	Water			1	1	2	1	1
				Water							
				Water							
				Water							
				Water							
				Water							

240-220484 COC

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are re
☐ Return To Client ☐ Disposal By Lab ☐

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

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

Relinquished by: Ryan Smith Date/Time: 3/14-25 Company: Received by:

Relinquished by: Date/Time: Company: Received by: Date/Time: 3/14/25

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form

IR GUN # 21 (CF +1.1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity _____	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# HC44
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 to be 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-099-123124 Cooler Receipt Form.doc

EC	Client	Box	Other	IR GUN #: 1	11.3	12.4	Wet Ice Blue Ice Water None
EC	Client	Box	Other	IR GUN #:	10.2	11.3	Wet Ice Blue Ice Water None
EC	Client	Box	Other	IR GUN #:	

2016-05-F-20250312-01	240-220484-E-1	Plastic 1 liter - Nitric Acid	<2			
96152-F-20250313-01	240-220484-A-2	Plastic 60 mL - unpreserved				
96152-F-20250313-01	240-220484-B-2	Plastic 60 mL - unpreserved				
96152-F-20250313-01	240-220484-C-2	Plastic 500ml - unpreserved				
96152-F-20250313-01	240-220484-D-2	Plastic 500ml - with Nitric Acid	<2			
96152-F-20250313-01	240-220484-E-2	Plastic 1 liter - Nitric Acid	<2			
96152-F-20250313-01	240-220484-F-2	Plastic 1 liter - Nitric Acid	<2			
DUP-003-F-20250313-01	240-220484-A-3	Plastic 60 mL - unpreserved				
DUP-003-F-20250313-01	240-220484-B-3	Plastic 60 mL - unpreserved				
DUP-003-F-20250313-01	240-220484-C-3	Plastic 500ml - unpreserved				
DUP-003-F-20250313-01	240-220484-D-3	Plastic 500ml - with Nitric Acid	<2			
DUP-003-F-20250313-01	240-220484-E-3	Plastic 1 liter - Nitric Acid	<2			
DUP-003-F-20250313-01	240-220484-F-3	Plastic 1 liter - Nitric Acid	<2			
MW-20-F-20250313-01	240-220484-A-4	Plastic 60 mL - unpreserved				
MW-20-F-20250313-01	240-220484-A-4 DU	Plastic 60 mL - unpreserved				
MW-20-F-20250313-MS-01	240-220484-A-4 MS	Plastic 60 mL - unpreserved				
MW-20-F-20250313-MSD-01	240-220484-A-4 MSD	Plastic 60 mL - unpreserved				
MW-20-F-20250313-01	240-220484-B-4	Plastic 60 mL - unpreserved				
MW-20-F-20250313-01	240-220484-B-4 DU	Plastic 500ml - unpreserved				
MW-20-F-20250313-MS-01	240-220484-B-4 MS	Plastic 60 mL - unpreserved				
MW-20-F-20250313-MSD-01	240-220484-B-4 MSD	Plastic 500ml - unpreserved				
MW-20-F-20250313-01	240-220484-C-4	Plastic 500ml - unpreserved				
MW-20-F-20250313-MS-01	240-220484-C-4 MS	Plastic 500ml - with Nitric Acid	<2			
MW-20-F-20250313-MSD-01	240-220484-C-4 MSD	Plastic 500ml - with Nitric Acid	<2			
MW-20-F-20250313-01	240-220484-D-4	Plastic 500ml - with Nitric Acid	<2			
MW-20-F-20250313-MS-01	240-220484-D-4 MS	Plastic 1 liter - Nitric Acid	<2			
MW-20-F-20250313-MSD-01	240-220484-D-4 MSD	Plastic 1 liter - Nitric Acid	<2			
MW-20-F-20250313-01	240-220484-E-4	Plastic 1 liter - Nitric Acid	<2			
MW-20-F-20250313-MS-01	240-220484-E-4 MS	Plastic 1 liter - Nitric Acid	<2			

Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-220484-1

Login Number: 220484
List Number: 2
Creator: Forrest, Cheyenne L

List Source: Eurofins St. Louis
List Creation: 03/18/25 11:56 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?	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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620

Generated 4/16/2025 1:24:46 PM

JOB DESCRIPTION

Federal CCR Wells

JOB NUMBER

240-220491-1

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

myEOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization

Roxanne Cisneros

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Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(330)497-9396

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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.
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.

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: 240-220491-1 — Eurofins Cleveland

Job Narrative
240-220491-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The sample was received on 3/15/2025 8:00 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 6 coolers at receipt time were 2.3°C, 3.4°C, 4.1°C, 4.3°C, 11.3°C and 12.4°C.

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

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

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

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

Method Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-220491-1
Project/Site: Federal CCR Wells

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CLE
6020B	Metals (ICP/MS)	SW846	EET CLE
7470A	Mercury (CVAA)	SW846	EET CLE
2320 B-2021	Alkalinity	SM	EET CLE
2540 C-2020	Solids, Total Dissolved (TDS)	SM	EET CLE
300.0	Anions, Ion Chromatography	EPA	EET CLE
9315	Radium 226 by GFPC	SW846	EET SL
9320	Radium-228 (GFPC)	SW846	EET SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	EET SL
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CLE
7470A	Preparation, Mercury	SW846	EET CLE
PrecSep_0	Preparation, Precipitate Separation	None	EET SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	EET SL

Protocol References:

EPA = US Environmental Protection Agency

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:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

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

Sample Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-220491-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-220491-1	93100-F-20250312-01	Water	03/12/25 13:05	03/15/25 08:00

Detection Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-220491-1

Client Sample ID: 93100-F-20250312-01

Lab Sample ID: 240-220491-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	490		100	57	ug/L	1		6010D	Total Recoverable
Antimony	0.61	J	2.0	0.57	ug/L	1		6020B	Total Recoverable
Arsenic	1.9	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	530		5.0	0.77	ug/L	1		6020B	Total Recoverable
Cadmium	0.15	J	1.0	0.077	ug/L	1		6020B	Total Recoverable
Calcium	16000		1000	250	ug/L	1		6020B	Total Recoverable
Chromium	3.7	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	3.9		1.0	0.086	ug/L	1		6020B	Total Recoverable
Lithium	40		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	5100		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	120		5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	2500		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	1400000		5000	4400	ug/L	5		6020B	Total Recoverable
Total Alkalinity	340		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	320		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Carbonate Alkalinity as CaCO3	19		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	3400		50	39	mg/L	1		2540 C-2020	Total/NA
Chloride	2000		20	2.6	mg/L	20		300.0	Total/NA
Fluoride	2.7		0.25	0.12	mg/L	5		300.0	Total/NA
Sulfate	16		5.0	1.7	mg/L	5		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 93100-F-20250312-01

Date Collected: 03/12/25 13:05
Date Received: 03/15/25 08:00

Lab Sample ID: 240-220491-1

Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	490		100	57	ug/L		03/18/25 14:00	03/20/25 04:11	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.61	J	2.0	0.57	ug/L		03/18/25 14:00	03/19/25 19:17	1
Arsenic	1.9	J	5.0	0.75	ug/L		03/18/25 14:00	03/19/25 19:17	1
Barium	530		5.0	0.77	ug/L		03/18/25 14:00	03/19/25 19:17	1
Beryllium	ND		1.0	0.27	ug/L		03/18/25 14:00	03/19/25 19:17	1
Cadmium	0.15	J	1.0	0.077	ug/L		03/18/25 14:00	03/19/25 19:17	1
Calcium	16000		1000	250	ug/L		03/18/25 14:00	03/19/25 19:17	1
Chromium	3.7	J	5.0	1.2	ug/L		03/18/25 14:00	03/19/25 19:17	1
Cobalt	3.9		1.0	0.086	ug/L		03/18/25 14:00	03/19/25 19:17	1
Lead	ND		1.0	0.45	ug/L		03/18/25 14:00	03/19/25 19:17	1
Lithium	40		8.0	3.4	ug/L		03/18/25 14:00	03/19/25 19:17	1
Magnesium	5100		1000	61	ug/L		03/18/25 14:00	03/19/25 19:17	1
Molybdenum	120		5.0	1.1	ug/L		03/18/25 14:00	03/19/25 19:17	1
Potassium	2500		1000	220	ug/L		03/18/25 14:00	03/19/25 19:17	1
Selenium	ND		5.0	0.89	ug/L		03/18/25 14:00	03/19/25 19:17	1
Sodium	1400000		5000	4400	ug/L		03/18/25 14:00	03/20/25 11:30	5
Thallium	ND		1.0	0.51	ug/L		03/18/25 14:00	03/19/25 19:17	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		03/18/25 14:00	03/19/25 14:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	340		5.0	2.6	mg/L			03/20/25 17:54	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	320		5.0	2.6	mg/L			03/20/25 17:54	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	19		5.0	2.6	mg/L			03/20/25 17:54	1
Total Dissolved Solids (SM 2540 C-2020)	3400		50	39	mg/L			03/18/25 15:12	1
Chloride (EPA 300.0)	2000		20	2.6	mg/L			03/24/25 18:47	20
Fluoride (EPA 300.0)	2.7		0.25	0.12	mg/L			03/24/25 18:38	5
Sulfate (EPA 300.0)	16		5.0	1.7	mg/L			03/24/25 18:38	5

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.601		0.283	0.288	1.00	0.318	pCi/L	03/19/25 08:15	04/15/25 21:22	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.3*		*30 - 110*	*03/19/25 08:15*	*04/15/25 21:22*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.643	U	0.503	0.507	1.00	0.773	pCi/L	03/19/25 08:19	04/15/25 14:34	1

Client Sample ID: 93100-F-20250312-01
Date Collected: 03/12/25 13:05
Date Received: 03/15/25 08:00

Lab Sample ID: 240-220491-1
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.3*		*30 - 110*	*03/19/25 08:19*	*04/15/25 14:34*	*1*
Y Carrier	*63.2*		*30 - 110*	*03/19/25 08:19*	*04/15/25 14:34*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**1.24**		0.577	0.583	5.00	0.773	pCi/L		04/16/25 12:10	1

Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-220491-1

Method: 9315 - Radium 226 by GFPC

Matrix: Water | **Prep Type: Total/NA**

		Percent Yield (Acceptance Limits)
		Ba
Lab Sample ID	Client Sample ID	(30-110)
240-220491-1	93100-F-20250312-01	81.3
LCS 160-708478/2-A	Lab Control Sample	86.7
MB 160-708478/1-A	Method Blank	90.4

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	(30-110)	(30-110)
240-220491-1	93100-F-20250312-01	81.3	63.2
LCS 160-708479/2-A	Lab Control Sample	86.7	79.3
MB 160-708479/1-A	Method Blank	90.4	74.0

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-220491-1

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-648615/1-A
Matrix: Water
Analysis Batch: 648900

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 648615

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		03/18/25 14:00	03/20/25 03:33	1

Lab Sample ID: LCS 240-648615/2-A
Matrix: Water
Analysis Batch: 648900

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 648615

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1000	1070		ug/L		107	80 - 120

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-648615/1-A
Matrix: Water
Analysis Batch: 648913

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 648615

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		03/18/25 14:00	03/19/25 19:05	1
Arsenic	ND		5.0	0.75	ug/L		03/18/25 14:00	03/19/25 19:05	1
Barium	ND		5.0	0.77	ug/L		03/18/25 14:00	03/19/25 19:05	1
Beryllium	ND		1.0	0.27	ug/L		03/18/25 14:00	03/19/25 19:05	1
Cadmium	ND		1.0	0.077	ug/L		03/18/25 14:00	03/19/25 19:05	1
Calcium	ND		1000	250	ug/L		03/18/25 14:00	03/19/25 19:05	1
Chromium	ND		5.0	1.2	ug/L		03/18/25 14:00	03/19/25 19:05	1
Cobalt	ND		1.0	0.086	ug/L		03/18/25 14:00	03/19/25 19:05	1
Lead	ND		1.0	0.45	ug/L		03/18/25 14:00	03/19/25 19:05	1
Lithium	ND		8.0	3.4	ug/L		03/18/25 14:00	03/19/25 19:05	1
Magnesium	ND		1000	61	ug/L		03/18/25 14:00	03/19/25 19:05	1
Molybdenum	ND		5.0	1.1	ug/L		03/18/25 14:00	03/19/25 19:05	1
Potassium	ND		1000	220	ug/L		03/18/25 14:00	03/19/25 19:05	1
Selenium	ND		5.0	0.89	ug/L		03/18/25 14:00	03/19/25 19:05	1
Sodium	ND		1000	880	ug/L		03/18/25 14:00	03/19/25 19:05	1
Thallium	ND		1.0	0.51	ug/L		03/18/25 14:00	03/19/25 19:05	1

Lab Sample ID: LCS 240-648615/3-A
Matrix: Water
Analysis Batch: 648913

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 648615

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	98.6		ug/L		99	80 - 120
Arsenic	1000	945		ug/L		95	80 - 120
Barium	1000	962		ug/L		96	80 - 120
Beryllium	500	463		ug/L		93	80 - 120
Cadmium	500	477		ug/L		95	80 - 120
Calcium	25000	23300		ug/L		93	80 - 120
Chromium	500	489		ug/L		98	80 - 120
Cobalt	500	463		ug/L		93	80 - 120
Lead	500	510		ug/L		102	80 - 120
Lithium	500	474		ug/L		95	80 - 120
Magnesium	25000	23800		ug/L		95	80 - 120

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

Lab Sample ID: LCS 240-648615/3-A
Matrix: Water
Analysis Batch: 648913

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 648615

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Molybdenum	500	473		ug/L		95	80 - 120
Potassium	25000	24700		ug/L		99	80 - 120
Selenium	1000	969		ug/L		97	80 - 120
Sodium	25000	24000		ug/L		96	80 - 120
Thallium	1000	1050		ug/L		105	80 - 120

Lab Sample ID: 240-220491-1 MS
Matrix: Water
Analysis Batch: 648913

Client Sample ID: 93100-F-20250312-01
Prep Type: Total Recoverable
Prep Batch: 648615

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.61	J	100	101		ug/L		101	80 - 120
Arsenic	1.9	J	1000	1060		ug/L		106	80 - 120
Barium	530		1000	1540		ug/L		100	80 - 120
Beryllium	ND		500	493		ug/L		99	80 - 120
Cadmium	0.15	J	500	477		ug/L		95	80 - 120
Calcium	16000		25000	40200		ug/L		97	80 - 120
Chromium	3.7	J	500	507		ug/L		101	80 - 120
Cobalt	3.9		500	513		ug/L		102	80 - 120
Lead	ND		500	513		ug/L		103	80 - 120
Lithium	40		500	560		ug/L		104	80 - 120
Magnesium	5100		25000	29100		ug/L		96	80 - 120
Molybdenum	120		500	644		ug/L		106	80 - 120
Potassium	2500		25000	28700		ug/L		105	80 - 120
Selenium	ND		1000	1000		ug/L		100	80 - 120
Thallium	ND		1000	1110		ug/L		111	80 - 120

Lab Sample ID: 240-220491-1 MS
Matrix: Water
Analysis Batch: 649013

Client Sample ID: 93100-F-20250312-01
Prep Type: Total Recoverable
Prep Batch: 648615

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sodium	1400000		25000	1480000	4	ug/L		143	80 - 120

Lab Sample ID: 240-220491-1 MSD
Matrix: Water
Analysis Batch: 648913

Client Sample ID: 93100-F-20250312-01
Prep Type: Total Recoverable
Prep Batch: 648615

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	0.61	J	100	101		ug/L		101	80 - 120	0	20
Arsenic	1.9	J	1000	1030		ug/L		103	80 - 120	3	20
Barium	530		1000	1520		ug/L		98	80 - 120	1	20
Beryllium	ND		500	492		ug/L		98	80 - 120	0	20
Cadmium	0.15	J	500	462		ug/L		92	80 - 120	3	20
Calcium	16000		25000	40600		ug/L		98	80 - 120	1	20
Chromium	3.7	J	500	490		ug/L		97	80 - 120	3	20
Cobalt	3.9		500	498		ug/L		99	80 - 120	3	20
Lead	ND		500	497		ug/L		99	80 - 120	3	20
Lithium	40		500	550		ug/L		102	80 - 120	2	20

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

Lab Sample ID: 240-220491-1 MSD
Matrix: Water
Analysis Batch: 648913

Client Sample ID: 93100-F-20250312-01
Prep Type: Total Recoverable
Prep Batch: 648615

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Magnesium	5100		25000	29600		ug/L		98	80 - 120	2	20
Molybdenum	120		500	626		ug/L		102	80 - 120	3	20
Potassium	2500		25000	28600		ug/L		105	80 - 120	0	20
Selenium	ND		1000	967		ug/L		97	80 - 120	3	20
Thallium	ND		1000	1090		ug/L		109	80 - 120	2	20

Lab Sample ID: 240-220491-1 MSD
Matrix: Water
Analysis Batch: 649013

Client Sample ID: 93100-F-20250312-01
Prep Type: Total Recoverable
Prep Batch: 648615

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sodium	1400000		25000	1480000	4	ug/L		149	80 - 120	0	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-648619/1-A
Matrix: Water
Analysis Batch: 648931

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 648619

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		03/18/25 14:00	03/19/25 13:54	1

Lab Sample ID: LCS 240-648619/2-A
Matrix: Water
Analysis Batch: 648931

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 648619

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.32		ug/L		106	80 - 120

Method: 2320 B-2021 - Alkalinity

Lab Sample ID: MB 240-649077/30
Matrix: Water
Analysis Batch: 649077

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	ND		5.0	2.6	mg/L			03/20/25 13:45	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/20/25 13:45	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/20/25 13:45	1

Lab Sample ID: MB 240-649077/56
Matrix: Water
Analysis Batch: 649077

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	ND		5.0	2.6	mg/L			03/20/25 15:56	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/20/25 15:56	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/20/25 15:56	1

Method: 2320 B-2021 - Alkalinity (Continued)

Lab Sample ID: LCS 240-649077/55
Matrix: Water
Analysis Batch: 649077

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	280	269		mg/L		96	86 - 123

Method: 2540 C-2020 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 240-648697/1
Matrix: Water
Analysis Batch: 648697

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	ND		10	7.8	mg/L			03/18/25 15:12	1

Lab Sample ID: LCS 240-648697/2
Matrix: Water
Analysis Batch: 648697

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	569	540		mg/L		95	80 - 120

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-649385/3
Matrix: Water
Analysis Batch: 649385

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.13	mg/L			03/24/25 16:11	1
Fluoride	ND		0.050	0.024	mg/L			03/24/25 16:11	1
Sulfate	ND		1.0	0.35	mg/L			03/24/25 16:11	1

Lab Sample ID: LCS 240-649385/4
Matrix: Water
Analysis Batch: 649385

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	48.2		mg/L		96	90 - 110
Fluoride	2.50	2.48		mg/L		99	90 - 110
Sulfate	50.0	47.7		mg/L		95	90 - 110

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-708478/1-A
Matrix: Water
Analysis Batch: 712586

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 708478

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.08310	U	0.113	0.113	1.00	0.295	pCi/L	03/19/25 08:15	04/15/25 21:20	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.4*		*30 - 110*	*03/19/25 08:15*	*04/15/25 21:20*	*1*

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-220491-1

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: LCS 160-708478/2-A
Matrix: Water
Analysis Batch: 712586

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 708478

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-226			9.58	9.326		1.25	1.00	0.346	pCi/L	97	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*86.7*		*30 - 110*

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-708479/1-A
Matrix: Water
Analysis Batch: 712607

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 708479

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.03724	U	0.329	0.329	1.00	0.606	pCi/L	03/19/25 08:19	04/15/25 14:32	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.4*		*30 - 110*	*03/19/25 08:19*	*04/15/25 14:32*	*1*
Y Carrier	*74.0*		*30 - 110*	*03/19/25 08:19*	*04/15/25 14:32*	*1*

Lab Sample ID: LCS 160-708479/2-A
Matrix: Water
Analysis Batch: 712607

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 708479

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228			9.54	10.59		1.44	1.00	0.564	pCi/L	111	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*86.7*		*30 - 110*
Y Carrier	*79.3*		*30 - 110*

Metals

Prep Batch: 648615

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220491-1	93100-F-20250312-01	Total Recoverable	Water	3005A	
MB 240-648615/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-648615/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-648615/3-A	Lab Control Sample	Total Recoverable	Water	3005A	
240-220491-1 MS	93100-F-20250312-01	Total Recoverable	Water	3005A	
240-220491-1 MSD	93100-F-20250312-01	Total Recoverable	Water	3005A	

Prep Batch: 648619

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220491-1	93100-F-20250312-01	Total/NA	Water	7470A	
MB 240-648619/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-648619/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 648900

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220491-1	93100-F-20250312-01	Total Recoverable	Water	6010D	648615
MB 240-648615/1-A	Method Blank	Total Recoverable	Water	6010D	648615
LCS 240-648615/2-A	Lab Control Sample	Total Recoverable	Water	6010D	648615

Analysis Batch: 648913

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220491-1	93100-F-20250312-01	Total Recoverable	Water	6020B	648615
MB 240-648615/1-A	Method Blank	Total Recoverable	Water	6020B	648615
LCS 240-648615/3-A	Lab Control Sample	Total Recoverable	Water	6020B	648615
240-220491-1 MS	93100-F-20250312-01	Total Recoverable	Water	6020B	648615
240-220491-1 MSD	93100-F-20250312-01	Total Recoverable	Water	6020B	648615

Analysis Batch: 648931

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220491-1	93100-F-20250312-01	Total/NA	Water	7470A	648619
MB 240-648619/1-A	Method Blank	Total/NA	Water	7470A	648619
LCS 240-648619/2-A	Lab Control Sample	Total/NA	Water	7470A	648619

Analysis Batch: 649013

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220491-1	93100-F-20250312-01	Total Recoverable	Water	6020B	648615
240-220491-1 MS	93100-F-20250312-01	Total Recoverable	Water	6020B	648615
240-220491-1 MSD	93100-F-20250312-01	Total Recoverable	Water	6020B	648615

General Chemistry

Analysis Batch: 648697

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220491-1	93100-F-20250312-01	Total/NA	Water	2540 C-2020	
MB 240-648697/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-648697/2	Lab Control Sample	Total/NA	Water	2540 C-2020	

Analysis Batch: 649077

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220491-1	93100-F-20250312-01	Total/NA	Water	2320 B-2021	
MB 240-649077/30	Method Blank	Total/NA	Water	2320 B-2021	

General Chemistry (Continued)

Analysis Batch: 649077 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-649077/56	Method Blank	Total/NA	Water	2320 B-2021	
LCS 240-649077/55	Lab Control Sample	Total/NA	Water	2320 B-2021	

Analysis Batch: 649385

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220491-1	93100-F-20250312-01	Total/NA	Water	300.0	
240-220491-1	93100-F-20250312-01	Total/NA	Water	300.0	
MB 240-649385/3	Method Blank	Total/NA	Water	300.0	
LCS 240-649385/4	Lab Control Sample	Total/NA	Water	300.0	

Rad

Prep Batch: 708478

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220491-1	93100-F-20250312-01	Total/NA	Water	PrecSep-21	
MB 160-708478/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-708478/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 708479

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220491-1	93100-F-20250312-01	Total/NA	Water	PrecSep_0	
MB 160-708479/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-708479/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-220491-1
Project/Site: Federal CCR Wells

Client Sample ID: 93100-F-20250312-01
Lab Sample ID: 240-220491-1
Date Collected: 03/12/25 13:05
Matrix: Water
Date Received: 03/15/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			648615	XWS6	EET CLE	03/18/25 14:00
Total Recoverable	Analysis	6010D		1	648900	AJC	EET CLE	03/20/25 04:11
Total Recoverable	Prep	3005A			648615	XWS6	EET CLE	03/18/25 14:00
Total Recoverable	Analysis	6020B		1	648913	S4FJ	EET CLE	03/19/25 19:17
Total Recoverable	Prep	3005A			648615	XWS6	EET CLE	03/18/25 14:00
Total Recoverable	Analysis	6020B		5	649013	S4FJ	EET CLE	03/20/25 11:30
Total/NA	Prep	7470A			648619	XWS6	EET CLE	03/18/25 14:00
Total/NA	Analysis	7470A		1	648931	GEV	EET CLE	03/19/25 14:02
Total/NA	Analysis	2320 B-2021		1	649077	PQD2	EET CLE	03/20/25 17:54
Total/NA	Analysis	2540 C-2020		1	648697	TAV2	EET CLE	03/18/25 15:12
Total/NA	Analysis	300.0		5	649385	JMR	EET CLE	03/24/25 18:38
Total/NA	Analysis	300.0		20	649385	JMR	EET CLE	03/24/25 18:47
Total/NA	Prep	PrecSep-21			708478	BMW	EET SL	03/19/25 08:15
Total/NA	Analysis	9315		1	712586	SWS	EET SL	04/15/25 21:22
Total/NA	Prep	PrecSep_0			708479	BMW	EET SL	03/19/25 08:19
Total/NA	Analysis	9320		1	712607	CMM	EET SL	04/15/25 14:34
Total/NA	Analysis	Ra226_Ra228		1	711957	EMH	EET SL	04/16/25 12:10

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

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

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-220491-1
Project/Site: Federal CCR Wells

Laboratory: Eurofins Cleveland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0806	12-31-26
Georgia	State	4062	02-27-26
Illinois	NELAP	200004	08-31-25
Iowa	State	421	06-01-25
Kansas	NELAP	E-10336	01-31-26
Kentucky (UST)	State	112225	02-28-26
Kentucky (WW)	State	KY98016	12-31-25
Minnesota	NELAP	039-999-348	12-31-25
New Hampshire	NELAP	225024	09-30-25
New Jersey	NELAP	OH001	07-03-25
New York	NELAP	10975	03-31-25
North Dakota	State	R-244	02-27-26
Ohio	State	8303	11-04-25
Ohio VAP	State	ORELAP 4062	02-28-26
Oregon	NELAP	4062	02-27-26
Pennsylvania	NELAP	68-00340	08-31-25
Texas	NELAP	T104704517-22-19	08-31-25
US Fish & Wildlife	US Federal Programs	A26406	02-28-26
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	09-14-25
West Virginia DEP	State	210	12-31-25
Wisconsin	State	399167560	08-31-25

Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-25
ANAB	Dept. of Defense ELAP	L2305	04-06-27
ANAB	Dept. of Energy	L2305.01	04-06-27
ANAB	ISO/IEC 17025	L2305	04-06-27
Arizona	State	AZ0813	12-08-25
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-25
Connecticut	State	PH-0241	03-31-25 *
Florida	NELAP	E87689	06-30-25
HI - RadChem Recognition	State	n/a	06-30-25
Illinois	NELAP	200023	11-30-25
Iowa	State	373	12-01-26
Kansas	NELAP	E-10236	10-31-25
Kentucky (DW)	State	KY90125	12-31-25
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-25
Louisiana (All)	NELAP	106151	06-30-25
Louisiana (DW)	State	LA011	12-31-25
Maryland	State	310	09-30-25
Massachusetts	State	M-MO054	06-30-25
MI - RadChem Recognition	State	9005	06-30-25
Missouri	State	780	06-30-25
Nevada	State	MO00054	07-31-25

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-220491-1
Project/Site: Federal CCR Wells

Laboratory: Eurofins St. Louis (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New Jersey	NELAP	MO002	06-30-25
New Mexico	State	MO00054	06-30-25
New York	NELAP	11616	03-31-26
North Carolina (DW)	State	29700	07-31-25
North Dakota	State	R-207	06-30-25
Oklahoma	NELAP	9997	08-31-25
Oregon	NELAP	4157	09-01-25
Pennsylvania	NELAP	68-00540	02-28-26
South Carolina	State	85002	06-30-25
Texas	NELAP	T104704193	07-31-25
US Fish & Wildlife	US Federal Programs	058448	07-31-25
USDA	US Federal Programs	525-23-138-94730	05-18-26
Utah	NELAP	MO00054	07-31-25
Virginia	NELAP	460230	06-14-25
Washington	State	C592	08-30-25
West Virginia DEP	State	381	10-31-25

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

Client Information

Client Contact: Taylor Huffman
Company: Lightstone Generation Gavin Power LLC
Address: 7397 OH-7
City: Cheshire
State, Zip: OH, 45620
Phone: 740-925-3171(Tel)
Email: taylor.huffman@lightstonegen.com
Project Name: Gavin CCR
Site:

Sampler: Bobby Caste
Phone: 740-373-4308
PWSID

Lab PM: Cisneros, Roxanne
E-Mail: roxanne.cisneros@et.eurofinsus.com

Carrier Tracking No(s):
State of Origin:

Due Date Requested:
TAT Requested (days):
Compliance Project: Δ Yes Δ No
PO #: 2935505
WO #:
Project #: 24019633
SSOW#:

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B, 6020, 7470A	2540C_Calcd - TDS	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	300.0_28D - Chloride, Fluoride & Sulfate	2320B - (MOD) Alkalinity
			Preservation Code:		X	X	D	N	D	N	N
93100-F-20250312-01	3-12-25	1305	G	Water			1	1	2	1	1
				Water							
				Water							
				Water							
				Water							
				Water							
				Water							
				Water							
				Water							
				Water							
				Water							
				Water							

240-220491 COC

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are ret
☐ Return To Client ☐ Disposal By Lab ☐ A

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: 3-14-25/ Company Received by:

Relinquished by: Date/Time: Company Received by:

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form

IR GUN # 21 (CF -1.1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2.	Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity_____	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# HC44
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 checked for pH 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-099-123124 Cooler Receipt Form.doc

EC	Client	Box	Other	IR GUN #: 1	11.3	12.4	Wet Ice Blue Ice Water None
EC	Client	Box	Other	IR GUN #:	10.2	11.3	Wet Ice Blue Ice Water None
EC	Client	Box	Other	IR GUN #:	

93100-F-20250312-01	240-220491-E-1	Plastic 1 liter - Nitric Acid	<2	_____	_____
93100-F-20250312-01	240-220491-F-1	Plastic 1 liter - Nitric Acid	<2	_____	_____

Page 1 of 1

Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-220491-1

Login Number: 220491
List Number: 2
Creator: Forrest, Cheyenne L

List Source: Eurofins St. Louis
List Creation: 03/18/25 11:56 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?	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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620

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JOB DESCRIPTION

Federal CCR Wells

JOB NUMBER

240-220622-1

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization

Roxanne Cisneros

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Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(330)497-9396

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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-220622-1
Project/Site: Federal CCR Wells

Qualifiers

Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

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

Job ID: 240-220622-1 — Eurofins Cleveland

Job Narrative
240-220622-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 3/19/2025 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.6°C.

Metals
Method 6020B - Total Recoverable: The continuing calibration verification (CCV) associated with batch 240-649264 recovered above the upper control limit for beryllium. The samples associated with this CCV were below the reporting limit for the affected analyte; therefore, the data have been reported. The associated samples are impacted: 96158-F-20250314-01 (240-220622-1), 96157-F-20250314-01 (240-220622-2) and 96154R-F-20250317-01 (240-220622-3).

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

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

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

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

Method Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-220622-1

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CLE
6020B	Metals (ICP/MS)	SW846	EET CLE
7470A	Mercury (CVAA)	SW846	EET CLE
2320 B-2021	Alkalinity	SM	EET CLE
2540 C-2020	Solids, Total Dissolved (TDS)	SM	EET CLE
300.0	Anions, Ion Chromatography	EPA	EET CLE
9315	Radium 226 by GFPC	SW846	EET SL
9320	Radium-228 (GFPC)	SW846	EET SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	EET SL
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CLE
7470A	Preparation, Mercury	SW846	EET CLE
PrecSep_0	Preparation, Precipitate Separation	None	EET SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	EET SL

Protocol References:

EPA = US Environmental Protection Agency

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:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

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

Sample Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-220622-1
Project/Site: Federal CCR Wells

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-220622-1	96158-F-20250314-01	Water	03/14/25 14:00	03/19/25 08:00
240-220622-2	96157-F-20250314-01	Water	03/14/25 15:15	03/19/25 08:00
240-220622-3	96154R-F-20250317-01	Water	03/17/25 14:44	03/19/25 08:00

Detection Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-220622-1

Client Sample ID: 96158-F-20250314-01 — Lab Sample ID: 240-220622-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	410		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	1.9	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	370		5.0	0.77	ug/L	1		6020B	Total Recoverable
Calcium	65000		1000	250	ug/L	1		6020B	Total Recoverable
Cobalt	0.56	J	1.0	0.086	ug/L	1		6020B	Total Recoverable
Lithium	34		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	12000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	8.6		5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	3300		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	750000		1000	880	ug/L	1		6020B	Total Recoverable
Total Alkalinity	340		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	340		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	2000		40	31	mg/L	1		2540 C-2020	Total/NA
Chloride	1100		10	1.3	mg/L	10		300.0	Total/NA
Fluoride	1.2		0.10	0.048	mg/L	2		300.0	Total/NA
Sulfate	56		2.0	0.70	mg/L	2		300.0	Total/NA

Client Sample ID: 96157-F-20250314-01 — Lab Sample ID: 240-220622-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	150		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	20		5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	410		5.0	0.77	ug/L	1		6020B	Total Recoverable
Calcium	62000		1000	250	ug/L	1		6020B	Total Recoverable
Cobalt	0.28	J	1.0	0.086	ug/L	1		6020B	Total Recoverable
Lithium	5.0	J	8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	12000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	6.4		5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	1600		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	270000		1000	880	ug/L	1		6020B	Total Recoverable
Total Alkalinity	360		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	360		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	810		20	16	mg/L	1		2540 C-2020	Total/NA
Chloride	280		5.0	0.64	mg/L	5		300.0	Total/NA
Fluoride	0.86		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	2.1		1.0	0.35	mg/L	1		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland

Detection Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-220622-1

Client Sample ID: 96154R-F-20250317-01

Lab Sample ID: 240-220622-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	270		100	57	ug/L	1		6010D	Total Recoverable
Antimony	0.64	J	2.0	0.57	ug/L	1		6020B	Total Recoverable
Arsenic	2.5	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	670		5.0	0.77	ug/L	1		6020B	Total Recoverable
Calcium	200000		1000	250	ug/L	1		6020B	Total Recoverable
Chromium	1.2	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	0.35	J	1.0	0.086	ug/L	1		6020B	Total Recoverable
Lead	0.47	J	1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	170		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	300	J	1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	62		5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	22000		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	310000		1000	880	ug/L	1		6020B	Total Recoverable
Total Alkalinity	480		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Carbonate Alkalinity as CaCO3	16		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	1000		40	31	mg/L	1		2540 C-2020	Total/NA
Chloride	290		2.0	0.26	mg/L	2		300.0	Total/NA
Fluoride	2.3		0.10	0.048	mg/L	2		300.0	Total/NA
Sulfate	32		2.0	0.70	mg/L	2		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 96158-F-20250314-01
Date Collected: 03/14/25 14:00
Date Received: 03/19/25 08:00

Lab Sample ID: 240-220622-1
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**410**		100	57	ug/L		03/20/25 14:00	03/24/25 15:07	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		03/20/25 14:00	03/21/25 21:37	1
Arsenic	**1.9**	**J**	5.0	0.75	ug/L		03/20/25 14:00	03/21/25 21:37	1
Barium	**370**		5.0	0.77	ug/L		03/20/25 14:00	03/21/25 21:37	1
Beryllium	ND	^+	1.0	0.27	ug/L		03/20/25 14:00	03/21/25 21:37	1
Cadmium	ND		1.0	0.077	ug/L		03/20/25 14:00	03/21/25 21:37	1
Calcium	**65000**		1000	250	ug/L		03/20/25 14:00	03/21/25 21:37	1
Chromium	ND		5.0	1.2	ug/L		03/20/25 14:00	03/21/25 21:37	1
Cobalt	**0.56**	**J**	1.0	0.086	ug/L		03/20/25 14:00	03/21/25 21:37	1
Lead	ND		1.0	0.45	ug/L		03/20/25 14:00	03/21/25 21:37	1
Lithium	**34**		8.0	3.4	ug/L		03/20/25 14:00	03/24/25 15:38	1
Magnesium	**12000**		1000	61	ug/L		03/20/25 14:00	03/21/25 21:37	1
Molybdenum	**8.6**		5.0	1.1	ug/L		03/20/25 14:00	03/21/25 21:37	1
Potassium	**3300**		1000	220	ug/L		03/20/25 14:00	03/21/25 21:37	1
Selenium	ND		5.0	0.89	ug/L		03/20/25 14:00	03/21/25 21:37	1
Sodium	**750000**		1000	880	ug/L		03/20/25 14:00	03/21/25 21:37	1
Thallium	ND		1.0	0.51	ug/L		03/20/25 14:00	03/21/25 21:37	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		03/20/25 14:00	03/21/25 13:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	**340**		5.0	2.6	mg/L			03/20/25 19:59	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**340**		5.0	2.6	mg/L			03/20/25 19:59	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			03/20/25 19:59	1
Total Dissolved Solids (SM 2540 C-2020)	**2000**		40	31	mg/L			03/20/25 08:32	1
Chloride (EPA 300.0)	**1100**		10	1.3	mg/L			03/21/25 03:01	10
Fluoride (EPA 300.0)	**1.2**		0.10	0.048	mg/L			03/21/25 02:52	2
Sulfate (EPA 300.0)	**56**		2.0	0.70	mg/L			03/21/25 02:52	2

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.636**		0.243	0.249	1.00	0.233	pCi/L	03/21/25 07:47	04/17/25 08:04	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.0*		*30 - 110*	*03/21/25 07:47*	*04/17/25 08:04*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**2.39**		0.612	0.650	1.00	0.708	pCi/L	03/21/25 07:51	04/16/25 12:14	1

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-220622-1

Client Sample ID: 96158-F-20250314-01
Date Collected: 03/14/25 14:00
Date Received: 03/19/25 08:00

Lab Sample ID: 240-220622-1
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.0*		*30 - 110*	*03/21/25 07:51*	*04/16/25 12:14*	*1*
Y Carrier	*84.5*		*30 - 110*	*03/21/25 07:51*	*04/16/25 12:14*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**3.03**		0.658	0.696	5.00	0.708	pCi/L		04/17/25 13:22	1

Client Sample ID: 96157-F-20250314-01
Date Collected: 03/14/25 15:15
Date Received: 03/19/25 08:00

Lab Sample ID: 240-220622-2
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**150**		100	57	ug/L		03/20/25 14:00	03/24/25 15:11	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		03/20/25 14:00	03/21/25 21:40	1
Arsenic	**20**		5.0	0.75	ug/L		03/20/25 14:00	03/21/25 21:40	1
Barium	**410**		5.0	0.77	ug/L		03/20/25 14:00	03/21/25 21:40	1
Beryllium	ND	^+	1.0	0.27	ug/L		03/20/25 14:00	03/21/25 21:40	1
Cadmium	ND		1.0	0.077	ug/L		03/20/25 14:00	03/21/25 21:40	1
Calcium	**62000**		1000	250	ug/L		03/20/25 14:00	03/21/25 21:40	1
Chromium	ND		5.0	1.2	ug/L		03/20/25 14:00	03/21/25 21:40	1
Cobalt	**0.28**	**J**	1.0	0.086	ug/L		03/20/25 14:00	03/21/25 21:40	1
Lead	ND		1.0	0.45	ug/L		03/20/25 14:00	03/21/25 21:40	1
Lithium	**5.0**	**J**	8.0	3.4	ug/L		03/20/25 14:00	03/24/25 15:41	1
Magnesium	**12000**		1000	61	ug/L		03/20/25 14:00	03/21/25 21:40	1
Molybdenum	**6.4**		5.0	1.1	ug/L		03/20/25 14:00	03/21/25 21:40	1
Potassium	**1600**		1000	220	ug/L		03/20/25 14:00	03/21/25 21:40	1
Selenium	ND		5.0	0.89	ug/L		03/20/25 14:00	03/21/25 21:40	1
Sodium	**270000**		1000	880	ug/L		03/20/25 14:00	03/21/25 21:40	1
Thallium	ND		1.0	0.51	ug/L		03/20/25 14:00	03/21/25 21:40	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		03/20/25 14:00	03/21/25 13:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	**360**		5.0	2.6	mg/L			03/20/25 20:07	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**360**		5.0	2.6	mg/L			03/20/25 20:07	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			03/20/25 20:07	1
Total Dissolved Solids (SM 2540 C-2020)	**810**		20	16	mg/L			03/20/25 08:32	1
Chloride (EPA 300.0)	**280**		5.0	0.64	mg/L			03/21/25 03:38	5
Fluoride (EPA 300.0)	**0.86**		0.050	0.024	mg/L			03/21/25 03:28	1
Sulfate (EPA 300.0)	**2.1**		1.0	0.35	mg/L			03/21/25 03:28	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.379**		0.219	0.222	1.00	0.283	pCi/L	03/21/25 07:47	04/17/25 08:04	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.9*		*30 - 110*	*03/21/25 07:47*	*04/17/25 08:04*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.478	U	0.449	0.451	1.00	0.718	pCi/L	03/21/25 07:51	04/16/25 12:07	1

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-220622-1

Client Sample ID: 96157-F-20250314-01
Date Collected: 03/14/25 15:15
Date Received: 03/19/25 08:00

Lab Sample ID: 240-220622-2
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.9*		*30 - 110*	*03/21/25 07:51*	*04/16/25 12:07*	*1*
Y Carrier	*77.8*		*30 - 110*	*03/21/25 07:51*	*04/16/25 12:07*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.857**		0.500	0.503	5.00	0.718	pCi/L		04/17/25 13:22	1

Client Sample ID: 96154R-F-20250317-01
Date Collected: 03/17/25 14:44
Date Received: 03/19/25 08:00

Lab Sample ID: 240-220622-3
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	270		100	57	ug/L		03/20/25 14:00	03/24/25 15:16	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.64	J	2.0	0.57	ug/L		03/20/25 14:00	03/21/25 21:42	1
Arsenic	2.5	J	5.0	0.75	ug/L		03/20/25 14:00	03/21/25 21:42	1
Barium	670		5.0	0.77	ug/L		03/20/25 14:00	03/21/25 21:42	1
Beryllium	ND	^+	1.0	0.27	ug/L		03/20/25 14:00	03/21/25 21:42	1
Cadmium	ND		1.0	0.077	ug/L		03/20/25 14:00	03/21/25 21:42	1
Calcium	200000		1000	250	ug/L		03/20/25 14:00	03/21/25 21:42	1
Chromium	1.2	J	5.0	1.2	ug/L		03/20/25 14:00	03/21/25 21:42	1
Cobalt	0.35	J	1.0	0.086	ug/L		03/20/25 14:00	03/21/25 21:42	1
Lead	0.47	J	1.0	0.45	ug/L		03/20/25 14:00	03/21/25 21:42	1
Lithium	170		8.0	3.4	ug/L		03/20/25 14:00	03/24/25 15:48	1
Magnesium	300	J	1000	61	ug/L		03/20/25 14:00	03/21/25 21:42	1
Molybdenum	62		5.0	1.1	ug/L		03/20/25 14:00	03/21/25 21:42	1
Potassium	22000		1000	220	ug/L		03/20/25 14:00	03/21/25 21:42	1
Selenium	ND		5.0	0.89	ug/L		03/20/25 14:00	03/21/25 21:42	1
Sodium	310000		1000	880	ug/L		03/20/25 14:00	03/21/25 21:42	1
Thallium	ND		1.0	0.51	ug/L		03/20/25 14:00	03/21/25 21:42	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		03/20/25 14:00	03/21/25 13:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	480		5.0	2.6	mg/L			03/20/25 20:13	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			03/20/25 20:13	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	16		5.0	2.6	mg/L			03/20/25 20:13	1
Total Dissolved Solids (SM 2540 C-2020)	1000		40	31	mg/L			03/21/25 10:44	1
Chloride (EPA 300.0)	290		2.0	0.26	mg/L			03/24/25 18:56	2
Fluoride (EPA 300.0)	2.3		0.10	0.048	mg/L			03/24/25 18:56	2
Sulfate (EPA 300.0)	32		2.0	0.70	mg/L			03/24/25 18:56	2

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.63		0.355	0.384	1.00	0.241	pCi/L	03/21/25 07:47	04/17/25 08:04	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.9*		*30 - 110*	*03/21/25 07:47*	*04/17/25 08:04*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.349	U	0.359	0.360	1.00	0.582	pCi/L	03/21/25 07:51	04/16/25 12:08	1

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-220622-1

Client Sample ID: 96154R-F-20250317-01
Date Collected: 03/17/25 14:44
Date Received: 03/19/25 08:00

Lab Sample ID: 240-220622-3
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.9*		*30 - 110*	*03/21/25 07:51*	*04/16/25 12:08*	*1*
Y Carrier	*83.7*		*30 - 110*	*03/21/25 07:51*	*04/16/25 12:08*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**1.98**		0.505	0.526	5.00	0.582	pCi/L		04/17/25 13:22	1

Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-220622-1

Method: 9315 - Radium 226 by GFPC

Matrix: Water **Prep Type: Total/NA**

		Percent Yield (Acceptance Limits)
		Ba
Lab Sample ID	Client Sample ID	(30-110)
240-220622-1	96158-F-20250314-01	87.0
240-220622-2	96157-F-20250314-01	81.9
240-220622-3	96154R-F-20250317-01	94.9
LCS 160-708742/2-A	Lab Control Sample	90.5
MB 160-708742/1-A	Method Blank	87.5

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	(30-110)	(30-110)
240-220622-1	96158-F-20250314-01	87.0	84.5
240-220622-2	96157-F-20250314-01	81.9	77.8
240-220622-3	96154R-F-20250317-01	94.9	83.7
LCS 160-708743/2-A	Lab Control Sample	90.5	82.6
MB 160-708743/1-A	Method Blank	87.5	81.5

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-648940/1-A
Matrix: Water
Analysis Batch: 649428

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 648940

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		03/20/25 14:00	03/24/25 14:20	1

Lab Sample ID: LCS 240-648940/2-A
Matrix: Water
Analysis Batch: 649428

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 648940

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1000	1040		ug/L		104	80 - 120

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-648940/1-A
Matrix: Water
Analysis Batch: 649264

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 648940

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		03/20/25 14:00	03/21/25 20:20	1
Arsenic	ND		5.0	0.75	ug/L		03/20/25 14:00	03/21/25 20:20	1
Barium	ND		5.0	0.77	ug/L		03/20/25 14:00	03/21/25 20:20	1
Beryllium	ND	^+	1.0	0.27	ug/L		03/20/25 14:00	03/21/25 20:20	1
Cadmium	ND		1.0	0.077	ug/L		03/20/25 14:00	03/21/25 20:20	1
Calcium	ND		1000	250	ug/L		03/20/25 14:00	03/21/25 20:20	1
Chromium	ND		5.0	1.2	ug/L		03/20/25 14:00	03/21/25 20:20	1
Cobalt	ND		1.0	0.086	ug/L		03/20/25 14:00	03/21/25 20:20	1
Lead	ND		1.0	0.45	ug/L		03/20/25 14:00	03/21/25 20:20	1
Magnesium	ND		1000	61	ug/L		03/20/25 14:00	03/21/25 20:20	1
Molybdenum	ND		5.0	1.1	ug/L		03/20/25 14:00	03/21/25 20:20	1
Potassium	ND		1000	220	ug/L		03/20/25 14:00	03/21/25 20:20	1
Selenium	ND		5.0	0.89	ug/L		03/20/25 14:00	03/21/25 20:20	1
Sodium	ND		1000	880	ug/L		03/20/25 14:00	03/21/25 20:20	1
Thallium	ND		1.0	0.51	ug/L		03/20/25 14:00	03/21/25 20:20	1

Lab Sample ID: MB 240-648940/1-A
Matrix: Water
Analysis Batch: 649440

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 648940

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	ND		8.0	3.4	ug/L		03/20/25 14:00	03/24/25 15:33	1

Lab Sample ID: LCS 240-648940/3-A
Matrix: Water
Analysis Batch: 649264

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 648940

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	93.6		ug/L		94	80 - 120
Arsenic	1000	867		ug/L		87	80 - 120
Barium	1000	914		ug/L		91	80 - 120
Beryllium	500	538	^+	ug/L		108	80 - 120
Cadmium	500	438		ug/L		88	80 - 120
Calcium	25000	24900		ug/L		100	80 - 120

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

Lab Sample ID: LCS 240-648940/3-A
Matrix: Water
Analysis Batch: 649264

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 648940

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chromium			500	451		ug/L		90	80 - 120		
Cobalt			500	415		ug/L		83	80 - 120		
Lead			500	475		ug/L		95	80 - 120		
Magnesium			25000	24400		ug/L		98	80 - 120		
Molybdenum			500	433		ug/L		87	80 - 120		
Potassium			25000	24900		ug/L		100	80 - 120		
Selenium			1000	851		ug/L		85	80 - 120		
Sodium			25000	24000		ug/L		96	80 - 120		
Thallium			1000	1110		ug/L		111	80 - 120		

Lab Sample ID: LCS 240-648940/3-A
Matrix: Water
Analysis Batch: 649440

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 648940

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Lithium			500	466		ug/L		93	80 - 120		

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-648946/1-A
Matrix: Water
Analysis Batch: 649169

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 648946

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		03/20/25 14:00	03/21/25 13:26	1

Lab Sample ID: LCS 240-648946/2-A
Matrix: Water
Analysis Batch: 649169

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 648946

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			5.00	4.71		ug/L		94	80 - 120		

Lab Sample ID: 240-220622-1 MS
Matrix: Water
Analysis Batch: 649169

Client Sample ID: 96158-F-20250314-01
Prep Type: Total/NA
Prep Batch: 648946

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	ND		1.00	1.03		ug/L		103	80 - 120		

Lab Sample ID: 240-220622-1 MSD
Matrix: Water
Analysis Batch: 649169

Client Sample ID: 96158-F-20250314-01
Prep Type: Total/NA
Prep Batch: 648946

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		1.00	1.03		ug/L		103	80 - 120	1	20

Method: 2320 B-2021 - Alkalinity

Lab Sample ID: MB 240-649077/56
Matrix: Water
Analysis Batch: 649077

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	ND		5.0	2.6	mg/L			03/20/25 15:56	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/20/25 15:56	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/20/25 15:56	1

Lab Sample ID: MB 240-649077/83
Matrix: Water
Analysis Batch: 649077

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	ND		5.0	2.6	mg/L			03/20/25 18:33	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/20/25 18:33	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			03/20/25 18:33	1

Lab Sample ID: LCS 240-649077/82
Matrix: Water
Analysis Batch: 649077

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Alkalinity			280	271		mg/L		97	86 - 123		

Method: 2540 C-2020 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 240-648921/1
Matrix: Water
Analysis Batch: 648921

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	ND		10	7.8	mg/L			03/20/25 08:32	1

Lab Sample ID: LCS 240-648921/2
Matrix: Water
Analysis Batch: 648921

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			569	558		mg/L		98	80 - 120		

Lab Sample ID: MB 240-649134/1
Matrix: Water
Analysis Batch: 649134

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	ND		10	7.8	mg/L			03/21/25 10:44	1

Lab Sample ID: LCS 240-649134/2
Matrix: Water
Analysis Batch: 649134

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			495	471		mg/L		95	80 - 120		

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-649003/3
Matrix: Water
Analysis Batch: 649003

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.13	mg/L			03/20/25 21:58	1
Fluoride	ND		0.050	0.024	mg/L			03/20/25 21:58	1
Sulfate	ND		1.0	0.35	mg/L			03/20/25 21:58	1

Lab Sample ID: LCS 240-649003/4
Matrix: Water
Analysis Batch: 649003

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	47.8		mg/L		96	90 - 110
Fluoride	2.50	2.46		mg/L		98	90 - 110
Sulfate	50.0	46.6		mg/L		93	90 - 110

Lab Sample ID: MB 240-649385/3
Matrix: Water
Analysis Batch: 649385

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.13	mg/L			03/24/25 16:11	1
Fluoride	ND		0.050	0.024	mg/L			03/24/25 16:11	1
Sulfate	ND		1.0	0.35	mg/L			03/24/25 16:11	1

Lab Sample ID: LCS 240-649385/4
Matrix: Water
Analysis Batch: 649385

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	48.2		mg/L		96	90 - 110
Fluoride	2.50	2.48		mg/L		99	90 - 110
Sulfate	50.0	47.7		mg/L		95	90 - 110

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-708742/1-A
Matrix: Water
Analysis Batch: 712862

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 708742

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.1037	U	0.0882	0.0887	1.00	0.256	pCi/L	03/21/25 07:47	04/17/25 08:04	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.5*		*30 - 110*	*03/21/25 07:47*	*04/17/25 08:04*	*1*

Method: 9315 - Radium 226 by GFPC (Continued)

Lab Sample ID: LCS 160-708742/2-A
Matrix: Water
Analysis Batch: 712862

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 708742

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-226			9.58	8.670		1.11	1.00	0.190	pCi/L	91	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*90.5*		*30 - 110*

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-708743/1-A
Matrix: Water
Analysis Batch: 712824

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 708743

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.08544	U	0.306	0.306	1.00	0.553	pCi/L	03/21/25 07:51	04/16/25 12:14	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.5*		*30 - 110*	*03/21/25 07:51*	*04/16/25 12:14*	*1*
Y Carrier	*81.5*		*30 - 110*	*03/21/25 07:51*	*04/16/25 12:14*	*1*

Lab Sample ID: LCS 160-708743/2-A
Matrix: Water
Analysis Batch: 712824

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 708743

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228			9.53	10.69		1.43	1.00	0.573	pCi/L	112	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*90.5*		*30 - 110*
Y Carrier	*82.6*		*30 - 110*

Metals

Prep Batch: 648940

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220622-1	96158-F-20250314-01	Total Recoverable	Water	3005A	
240-220622-2	96157-F-20250314-01	Total Recoverable	Water	3005A	
240-220622-3	96154R-F-20250317-01	Total Recoverable	Water	3005A	
MB 240-648940/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-648940/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-648940/3-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 648946

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220622-1	96158-F-20250314-01	Total/NA	Water	7470A	
240-220622-2	96157-F-20250314-01	Total/NA	Water	7470A	
240-220622-3	96154R-F-20250317-01	Total/NA	Water	7470A	
MB 240-648946/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-648946/2-A	Lab Control Sample	Total/NA	Water	7470A	
240-220622-1 MS	96158-F-20250314-01	Total/NA	Water	7470A	
240-220622-1 MSD	96158-F-20250314-01	Total/NA	Water	7470A	

Analysis Batch: 649169

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220622-1	96158-F-20250314-01	Total/NA	Water	7470A	648946
240-220622-2	96157-F-20250314-01	Total/NA	Water	7470A	648946
240-220622-3	96154R-F-20250317-01	Total/NA	Water	7470A	648946
MB 240-648946/1-A	Method Blank	Total/NA	Water	7470A	648946
LCS 240-648946/2-A	Lab Control Sample	Total/NA	Water	7470A	648946
240-220622-1 MS	96158-F-20250314-01	Total/NA	Water	7470A	648946
240-220622-1 MSD	96158-F-20250314-01	Total/NA	Water	7470A	648946

Analysis Batch: 649264

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220622-1	96158-F-20250314-01	Total Recoverable	Water	6020B	648940
240-220622-2	96157-F-20250314-01	Total Recoverable	Water	6020B	648940
240-220622-3	96154R-F-20250317-01	Total Recoverable	Water	6020B	648940
MB 240-648940/1-A	Method Blank	Total Recoverable	Water	6020B	648940
LCS 240-648940/3-A	Lab Control Sample	Total Recoverable	Water	6020B	648940

Analysis Batch: 649428

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220622-1	96158-F-20250314-01	Total Recoverable	Water	6010D	648940
240-220622-2	96157-F-20250314-01	Total Recoverable	Water	6010D	648940
240-220622-3	96154R-F-20250317-01	Total Recoverable	Water	6010D	648940
MB 240-648940/1-A	Method Blank	Total Recoverable	Water	6010D	648940
LCS 240-648940/2-A	Lab Control Sample	Total Recoverable	Water	6010D	648940

Analysis Batch: 649440

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220622-1	96158-F-20250314-01	Total Recoverable	Water	6020B	648940
240-220622-2	96157-F-20250314-01	Total Recoverable	Water	6020B	648940
240-220622-3	96154R-F-20250317-01	Total Recoverable	Water	6020B	648940
MB 240-648940/1-A	Method Blank	Total Recoverable	Water	6020B	648940
LCS 240-648940/3-A	Lab Control Sample	Total Recoverable	Water	6020B	648940

General Chemistry

Analysis Batch: 648921

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220622-1	96158-F-20250314-01	Total/NA	Water	2540 C-2020	
240-220622-2	96157-F-20250314-01	Total/NA	Water	2540 C-2020	
MB 240-648921/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-648921/2	Lab Control Sample	Total/NA	Water	2540 C-2020	

Analysis Batch: 649003

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220622-1	96158-F-20250314-01	Total/NA	Water	300.0	
240-220622-1	96158-F-20250314-01	Total/NA	Water	300.0	
240-220622-2	96157-F-20250314-01	Total/NA	Water	300.0	
240-220622-2	96157-F-20250314-01	Total/NA	Water	300.0	
MB 240-649003/3	Method Blank	Total/NA	Water	300.0	
LCS 240-649003/4	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 649077

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220622-1	96158-F-20250314-01	Total/NA	Water	2320 B-2021	
240-220622-2	96157-F-20250314-01	Total/NA	Water	2320 B-2021	
240-220622-3	96154R-F-20250317-01	Total/NA	Water	2320 B-2021	
MB 240-649077/56	Method Blank	Total/NA	Water	2320 B-2021	
MB 240-649077/83	Method Blank	Total/NA	Water	2320 B-2021	
LCS 240-649077/82	Lab Control Sample	Total/NA	Water	2320 B-2021	

Analysis Batch: 649134

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220622-3	96154R-F-20250317-01	Total/NA	Water	2540 C-2020	
MB 240-649134/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-649134/2	Lab Control Sample	Total/NA	Water	2540 C-2020	

Analysis Batch: 649385

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220622-3	96154R-F-20250317-01	Total/NA	Water	300.0	
MB 240-649385/3	Method Blank	Total/NA	Water	300.0	
LCS 240-649385/4	Lab Control Sample	Total/NA	Water	300.0	

Rad

Prep Batch: 708742

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220622-1	96158-F-20250314-01	Total/NA	Water	PrecSep-21	
240-220622-2	96157-F-20250314-01	Total/NA	Water	PrecSep-21	
240-220622-3	96154R-F-20250317-01	Total/NA	Water	PrecSep-21	
MB 160-708742/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-708742/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 708743

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-220622-1	96158-F-20250314-01	Total/NA	Water	PrecSep_0	
240-220622-2	96157-F-20250314-01	Total/NA	Water	PrecSep_0	
240-220622-3	96154R-F-20250317-01	Total/NA	Water	PrecSep_0	
MB 160-708743/1-A	Method Blank	Total/NA	Water	PrecSep_0	

Rad (Continued)

Prep Batch: 708743 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 160-708743/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Client Sample ID: 96158-F-20250314-01

Lab Sample ID: 240-220622-1

Date Collected: 03/14/25 14:00

Matrix: Water

Date Received: 03/19/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			648940	XWS6	EET CLE	03/20/25 14:00
Total Recoverable	Analysis	6010D		1	649428	RKT	EET CLE	03/24/25 15:07
Total Recoverable	Prep	3005A			648940	XWS6	EET CLE	03/20/25 14:00
Total Recoverable	Analysis	6020B		1	649264	S4FJ	EET CLE	03/21/25 21:37
Total Recoverable	Prep	3005A			648940	XWS6	EET CLE	03/20/25 14:00
Total Recoverable	Analysis	6020B		1	649440	S4FJ	EET CLE	03/24/25 15:38
Total/NA	Prep	7470A			648946	XWS6	EET CLE	03/20/25 14:00
Total/NA	Analysis	7470A		1	649169	GEV	EET CLE	03/21/25 13:30
Total/NA	Analysis	2320 B-2021		1	649077	PQD2	EET CLE	03/20/25 19:59
Total/NA	Analysis	2540 C-2020		1	648921	C5SV	EET CLE	03/20/25 08:32
Total/NA	Analysis	300.0		2	649003	JMR	EET CLE	03/21/25 02:52
Total/NA	Analysis	300.0		10	649003	JMR	EET CLE	03/21/25 03:01
Total/NA	Prep	PrecSep-21			708742	MLT	EET SL	03/21/25 07:47
Total/NA	Analysis	9315		1	712862	SWS	EET SL	04/17/25 08:04
Total/NA	Prep	PrecSep_0			708743	MLT	EET SL	03/21/25 07:51
Total/NA	Analysis	9320		1	712824	FLC	EET SL	04/16/25 12:14
Total/NA	Analysis	Ra226_Ra228		1	711957	EMH	EET SL	04/17/25 13:22

Client Sample ID: 96157-F-20250314-01

Lab Sample ID: 240-220622-2

Date Collected: 03/14/25 15:15

Matrix: Water

Date Received: 03/19/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			648940	XWS6	EET CLE	03/20/25 14:00
Total Recoverable	Analysis	6010D		1	649428	RKT	EET CLE	03/24/25 15:11
Total Recoverable	Prep	3005A			648940	XWS6	EET CLE	03/20/25 14:00
Total Recoverable	Analysis	6020B		1	649264	S4FJ	EET CLE	03/21/25 21:40
Total Recoverable	Prep	3005A			648940	XWS6	EET CLE	03/20/25 14:00
Total Recoverable	Analysis	6020B		1	649440	S4FJ	EET CLE	03/24/25 15:41
Total/NA	Prep	7470A			648946	XWS6	EET CLE	03/20/25 14:00
Total/NA	Analysis	7470A		1	649169	GEV	EET CLE	03/21/25 13:35
Total/NA	Analysis	2320 B-2021		1	649077	PQD2	EET CLE	03/20/25 20:07
Total/NA	Analysis	2540 C-2020		1	648921	C5SV	EET CLE	03/20/25 08:32
Total/NA	Analysis	300.0		1	649003	JMR	EET CLE	03/21/25 03:28
Total/NA	Analysis	300.0		5	649003	JMR	EET CLE	03/21/25 03:38
Total/NA	Prep	PrecSep-21			708742	MLT	EET SL	03/21/25 07:47
Total/NA	Analysis	9315		1	712862	SWS	EET SL	04/17/25 08:04
Total/NA	Prep	PrecSep_0			708743	MLT	EET SL	03/21/25 07:51
Total/NA	Analysis	9320		1	712794	FLC	EET SL	04/16/25 12:07
Total/NA	Analysis	Ra226_Ra228		1	711957	EMH	EET SL	04/17/25 13:22

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-220622-1
Project/Site: Federal CCR Wells

Client Sample ID: 96154R-F-20250317-01
Lab Sample ID: 240-220622-3
Date Collected: 03/17/25 14:44
Matrix: Water
Date Received: 03/19/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			648940	XWS6	EET CLE	03/20/25 14:00
Total Recoverable	Analysis	6010D		1	649428	RKT	EET CLE	03/24/25 15:16
Total Recoverable	Prep	3005A			648940	XWS6	EET CLE	03/20/25 14:00
Total Recoverable	Analysis	6020B		1	649264	S4FJ	EET CLE	03/21/25 21:42
Total Recoverable	Prep	3005A			648940	XWS6	EET CLE	03/20/25 14:00
Total Recoverable	Analysis	6020B		1	649440	S4FJ	EET CLE	03/24/25 15:48
Total/NA	Prep	7470A			648946	XWS6	EET CLE	03/20/25 14:00
Total/NA	Analysis	7470A		1	649169	GEV	EET CLE	03/21/25 13:36
Total/NA	Analysis	2320 B-2021		1	649077	PQD2	EET CLE	03/20/25 20:13
Total/NA	Analysis	2540 C-2020		1	649134	TAV2	EET CLE	03/21/25 10:44
Total/NA	Analysis	300.0		2	649385	JMR	EET CLE	03/24/25 18:56
Total/NA	Prep	PrecSep-21			708742	MLT	EET SL	03/21/25 07:47
Total/NA	Analysis	9315		1	712862	SWS	EET SL	04/17/25 08:04
Total/NA	Prep	PrecSep_0			708743	MLT	EET SL	03/21/25 07:51
Total/NA	Analysis	9320		1	712794	FLC	EET SL	04/16/25 12:08
Total/NA	Analysis	Ra226_Ra228		1	711957	EMH	EET SL	04/17/25 13:22

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

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

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-220622-1
Project/Site: Federal CCR Wells

Laboratory: Eurofins Cleveland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0806	12-31-26
Georgia	State	4062	02-27-26
Illinois	NELAP	200004	08-31-25
Iowa	State	421	06-01-25
Kansas	NELAP	E-10336	01-31-26
Kentucky (UST)	State	112225	02-28-26
Kentucky (WW)	State	KY98016	12-31-25
Minnesota	NELAP	039-999-348	12-31-25
New Hampshire	NELAP	225024	09-30-25
New Jersey	NELAP	OH001	07-03-25
New York	NELAP	10975	03-31-25
North Dakota	State	R-244	02-27-26
Ohio	State	8303	11-04-25
Ohio VAP	State	ORELAP 4062	02-28-26
Oregon	NELAP	4062	02-27-26
Pennsylvania	NELAP	68-00340	08-31-25
Texas	NELAP	T104704517-22-19	08-31-25
US Fish & Wildlife	US Federal Programs	A26406	02-28-26
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	09-14-25
West Virginia DEP	State	210	12-31-25
Wisconsin	State	399167560	08-31-25

Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-25
ANAB	Dept. of Defense ELAP	L2305	04-06-27
ANAB	Dept. of Energy	L2305.01	04-06-27
ANAB	ISO/IEC 17025	L2305	04-06-27
Arizona	State	AZ0813	12-08-25
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-25
Connecticut	State	PH-0241	03-31-25 *
Florida	NELAP	E87689	06-30-25
HI - RadChem Recognition	State	n/a	06-30-25
Illinois	NELAP	200023	11-30-25
Iowa	State	373	12-01-26
Kansas	NELAP	E-10236	10-31-25
Kentucky (DW)	State	KY90125	12-31-25
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-25
Louisiana (All)	NELAP	106151	06-30-25
Louisiana (DW)	State	LA011	12-31-25
Maryland	State	310	09-30-25
Massachusetts	State	M-MO054	06-30-25
MI - RadChem Recognition	State	9005	06-30-25
Missouri	State	780	06-30-25
Nevada	State	MO00054	07-31-25

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-220622-1
Project/Site: Federal CCR Wells

Laboratory: Eurofins St. Louis (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New Jersey	NELAP	MO002	06-30-25
New Mexico	State	MO00054	06-30-25
New York	NELAP	11616	03-31-26
North Carolina (DW)	State	29700	07-31-25
North Dakota	State	R-207	06-30-25
Oklahoma	NELAP	9997	08-31-25
Oregon	NELAP	4157	09-01-25
Pennsylvania	NELAP	68-00540	02-28-26
South Carolina	State	85002	06-30-25
Texas	NELAP	T104704193	07-31-25
US Fish & Wildlife	US Federal Programs	058448	07-31-25
USDA	US Federal Programs	525-23-138-94730	05-18-26
Utah	NELAP	MO00054	07-31-25
Virginia	NELAP	460230	06-14-25
Washington	State	C592	08-30-25
West Virginia DEP	State	381	10-31-25

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

2.6|2.6

Chain of Custody Record

Client Information	Sampler: Byan Smith	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s):
Client Contact: Taylor Huffman	Phone: 740-373-4308	E-Mail: roxanne.cisneros@et.eurofinsus.com	State of Origin:
Company: Lightstone Generation Gavin Power LLC	PWSID		
Address: 7397 OH-7	Due Date Requested:		
City: Cheshire	TAT Requested (days):		
State, Zip: OH, 45620	Compliance Project: Δ Yes Δ No		
Phone: 740-925-3171(Tel)	PO #: 2935505		
Email: taylor.huffman@lightstonegen.com	WO #:		
Project Name: Gavin CCR	Project #: 24019633		
Site: Gavin	SSOW#:		

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B, 6020, 7470A	2540C_Calcd - TDS	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	300.0_28D - Chloride, Fluoride & Sulfate	2320B - (MOD) Alkalinity
			Preservation Code:				D	N	D	N	N
96158-F-20250314-01	3-14-25	1400	G	Water			1	1	2	1	1
96157-F-20250314-01	3-14-25	1515	G	Water			1	1	2	1	1
96154R-F-20250317-01	3-17-25	1444	G	Water			1	1	2	1	1
				Water							
				Water							
				Water							
				Water							
				Water							
				Water							
				Water							
				Water							

240-220622 COC

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are re
☐ Return To Client ☐ Disposal By Lab ☐

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: 3-18-25 Company

Relinquished by: Date/Time: Company

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form

IR GUN # 13 (CF +0.0 °C) Observed Cooler Temp. 2.6 °C Corrected Cooler Temp. 2.6

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	(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# HC44
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 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-099-123124 Cooler Receipt Form.doc

96158-F-20250314-01	240-220622-D-1	Plastic 500ml - with Nitric Acid	<2			
96158-F-20250314-01	240-220622-E-1	Plastic 1 liter - Nitric Acid	<2			
96158-F-20250314-01	240-220622-F-1	Plastic 1 liter - Nitric Acid	<2			
96157-F-20250314-01	240-220622-A-2	Plastic 60 mL - unpreserved				
96157-F-20250314-01	240-220622-B-2	Plastic 60 mL - unpreserved				
96157-F-20250314-01	240-220622-C-2	Plastic 500ml - unpreserved				
96157-F-20250314-01	240-220622-D-2	Plastic 500ml - with Nitric Acid	<2			
96157-F-20250314-01	240-220622-E-2	Plastic 1 liter - Nitric Acid	<2			
96157-F-20250314-01	240-220622-F-2	Plastic 1 liter - Nitric Acid	<2			
96154R-F-20250317-01	240-220622-A-3	Plastic 60 mL - unpreserved				
96154R-F-20250317-01	240-220622-B-3	Plastic 60 mL - unpreserved				
96154R-F-20250317-01	240-220622-C-3	Plastic 500ml - unpreserved				
96154R-F-20250317-01	240-220622-D-3	Plastic 500ml - with Nitric Acid	<2			
96154R-F-20250317-01	240-220622-E-3	Plastic 1 liter - Nitric Acid	<2			
96154R-F-20250317-01	240-220622-F-3	Plastic 1 liter - Nitric Acid	<2			

Page 1 of 1

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Barberton, OH 44203
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Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s): N/A	COC No: 240-200017.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: roxanne.cisneros@et.eurofinsus.com	State of Origin: Ohio	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): N/A		Job #: 240-220622-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 4/1/2025			Preservation Codes: -
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Federal GWM Wells	Project #: 24019633			
Site: N/A	SSOW#: N/A			Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9320_Ra228/PrecSep_0 Radium-228 (GFPC)	9315_Ra226/PrecSep_21 Radium-226 (GFPC)	Ra226Ra228_GFPC/ Combined Radium-226 and Radium-228	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
96158-F-20250314-01 (240-220622-1)	3/14/25	14:00 Eastern	G	Water			X	X	X	2	
96157-F-20250314-01 (240-220622-2)	3/14/25	15:15 Eastern	G	Water			X	X	X	2	
96154R-F-20250317-01 (240-220622-3)	3/17/25	14:44 Eastern	G	Water			X	X	X	2	

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

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

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

Relinquished by:	Date/Time: 3/19/25	Company: Euro	Received by:	Date/Time: 6490 MAR 20 2025	Company
Relinquished by:	Date/Time:	Company	Received by: Cheyenne Forrest	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:

4/17/2025

Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-220622-1

Login Number: 220622
List Number: 2
Creator: Forrest, Cheyenne L

List Source: Eurofins St. Louis
List Creation: 03/20/25 11:37 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?	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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620

Generated 4/28/2025 3:23:33 PM

JOB DESCRIPTION

Federal CCR Wells

JOB NUMBER

240-221254-1

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

myEOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization

Roxanne Cisneros

Generated
4/28/2025 3:23:33 PM

Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(330)497-9396

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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-221254-1

Qualifiers

Metals

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

General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

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

Job ID: 240-221254-1 — Eurofins Cleveland

Job Narrative
240-221254-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 3/29/2025 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.8°C.

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

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

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

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

Method Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-221254-1
Project/Site: Federal CCR Wells

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CLE
6020B	Metals (ICP/MS)	SW846	EET CLE
7470A	Mercury (CVAA)	SW846	EET CLE
2320 B-2021	Alkalinity	SM	EET CLE
2540 C-2020	Solids, Total Dissolved (TDS)	SM	EET CLE
300.0	Anions, Ion Chromatography	EPA	EET CLE
9315	Radium 226 by GFPC	SW846	EET SL
9320	Radium-228 (GFPC)	SW846	EET SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	EET SL
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CLE
7470A	Preparation, Mercury	SW846	EET CLE
PrecSep_0	Preparation, Precipitate Separation	None	EET SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	EET SL

Protocol References:

EPA = US Environmental Protection Agency

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:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

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

Sample Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-221254-1
Project/Site: Federal CCR Wells

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-221254-1	2016-07-FO-LF-20250326-01	Water	03/26/25 11:45	03/29/25 08:00
240-221254-2	2016-06-FO-LF-20250326-01	Water	03/26/25 13:20	03/29/25 08:00

Detection Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-221254-1

Client Sample ID: 2016-07-FO-LF-20250326-01 — Lab Sample ID: 240-221254-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	470		100	57	ug/L	1		6010D	Total Recoverable
Antimony	1.1	J	2.0	0.57	ug/L	1		6020B	Total Recoverable
Arsenic	3.0	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	710		5.0	0.77	ug/L	1		6020B	Total Recoverable
Beryllium	0.35	J	1.0	0.27	ug/L	1		6020B	Total Recoverable
Cadmium	0.25	J	1.0	0.077	ug/L	1		6020B	Total Recoverable
Calcium	26000		1000	250	ug/L	1		6020B	Total Recoverable
Chromium	6.1		5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	1.0		1.0	0.086	ug/L	1		6020B	Total Recoverable
Lead	1.8		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	48		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	5900		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	59		5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	4000		1000	220	ug/L	1		6020B	Total Recoverable
Selenium	1.1	J	5.0	0.89	ug/L	1		6020B	Total Recoverable
Sodium	1100000		5000	4400	ug/L	5		6020B	Total Recoverable
Thallium	0.78	J	1.0	0.51	ug/L	1		6020B	Total Recoverable
Total Alkalinity	300	B	5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	300	B	5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	2600		50	39	mg/L	1		2540 C-2020	Total/NA
Chloride	1500		20	2.6	mg/L	20		300.0	Total/NA
Fluoride	2.5		0.25	0.12	mg/L	5		300.0	Total/NA
Sulfate	23		5.0	1.7	mg/L	5		300.0	Total/NA

Client Sample ID: 2016-06-FO-LF-20250326-01 — Lab Sample ID: 240-221254-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	500		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	1.9	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	78		5.0	0.77	ug/L	1		6020B	Total Recoverable
Cadmium	0.11	J	1.0	0.077	ug/L	1		6020B	Total Recoverable
Calcium	5800		1000	250	ug/L	1		6020B	Total Recoverable
Chromium	11		5.0	1.2	ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland

Client Sample ID: 2016-06-FO-LF-20250326-01 (Continued)

Lab Sample ID: 240-221254-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	1.3		1.0	0.086	ug/L	1		6020B	Total Recoverable
Lead	1.8		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	27		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	1900		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	58		5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	3300		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	670000		1000	880	ug/L	1		6020B	Total Recoverable
Total Alkalinity	480	B	5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	450	B	5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Carbonate Alkalinity as CaCO3	31		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	1600		20	16	mg/L	1		2540 C-2020	Total/NA
Chloride	610		10	1.3	mg/L	10		300.0	Total/NA
Fluoride	4.9		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	90		1.0	0.35	mg/L	1		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 2016-07-FO-LF-20250326-01
Date Collected: 03/26/25 11:45
Date Received: 03/29/25 08:00

Lab Sample ID: 240-221254-1
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	470		100	57	ug/L		03/31/25 14:00	04/02/25 08:40	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.1	J	2.0	0.57	ug/L		03/31/25 14:00	04/02/25 15:23	1
Arsenic	3.0	J	5.0	0.75	ug/L		03/31/25 14:00	04/02/25 15:23	1
Barium	710		5.0	0.77	ug/L		03/31/25 14:00	04/02/25 15:23	1
Beryllium	0.35	J	1.0	0.27	ug/L		03/31/25 14:00	04/02/25 15:23	1
Cadmium	0.25	J	1.0	0.077	ug/L		03/31/25 14:00	04/02/25 15:23	1
Calcium	26000		1000	250	ug/L		03/31/25 14:00	04/02/25 15:23	1
Chromium	6.1		5.0	1.2	ug/L		03/31/25 14:00	04/02/25 15:23	1
Cobalt	1.0		1.0	0.086	ug/L		03/31/25 14:00	04/02/25 15:23	1
Lead	1.8		1.0	0.45	ug/L		03/31/25 14:00	04/02/25 15:23	1
Lithium	48		8.0	3.4	ug/L		03/31/25 14:00	04/02/25 15:23	1
Magnesium	5900		1000	61	ug/L		03/31/25 14:00	04/02/25 15:23	1
Molybdenum	59		5.0	1.1	ug/L		03/31/25 14:00	04/02/25 15:23	1
Potassium	4000		1000	220	ug/L		03/31/25 14:00	04/02/25 15:23	1
Selenium	1.1	J	5.0	0.89	ug/L		03/31/25 14:00	04/02/25 15:23	1
Sodium	1100000		5000	4400	ug/L		03/31/25 14:00	04/03/25 13:34	5
Thallium	0.78	J	1.0	0.51	ug/L		03/31/25 14:00	04/02/25 15:23	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		03/31/25 14:00	04/01/25 11:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	300	B	5.0	2.6	mg/L			04/02/25 11:15	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	300	B	5.0	2.6	mg/L			04/02/25 11:15	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			04/02/25 11:15	1
Total Dissolved Solids (SM 2540 C-2020)	2600		50	39	mg/L			04/01/25 11:24	1
Chloride (EPA 300.0)	1500		20	2.6	mg/L			04/01/25 03:57	20
Fluoride (EPA 300.0)	2.5		0.25	0.12	mg/L			04/01/25 03:48	5
Sulfate (EPA 300.0)	23		5.0	1.7	mg/L			04/01/25 03:48	5

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.17		0.372	0.387	1.00	0.356	pCi/L	04/03/25 07:32	04/28/25 10:08	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.0*		*30 - 110*	*04/03/25 07:32*	*04/28/25 10:08*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.663	U	0.525	0.529	1.00	0.816	pCi/L	04/03/25 07:37	04/27/25 11:18	1

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-221254-1

Client Sample ID: 2016-07-FO-LF-20250326-01
Date Collected: 03/26/25 11:45
Date Received: 03/29/25 08:00

Lab Sample ID: 240-221254-1
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.0*		*30 - 110*	*04/03/25 07:37*	*04/27/25 11:18*	*1*
Y Carrier	*78.5*		*30 - 110*	*04/03/25 07:37*	*04/27/25 11:18*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**1.83**		0.643	0.655	5.00	0.816	pCi/L		04/28/25 13:12	1

Client Sample ID: 2016-06-FO-LF-20250326-01
Date Collected: 03/26/25 13:20
Date Received: 03/29/25 08:00

Lab Sample ID: 240-221254-2
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	500		100	57	ug/L		03/31/25 14:00	04/02/25 08:45	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		03/31/25 14:00	04/02/25 15:26	1
Arsenic	1.9	J	5.0	0.75	ug/L		03/31/25 14:00	04/02/25 15:26	1
Barium	78		5.0	0.77	ug/L		03/31/25 14:00	04/02/25 15:26	1
Beryllium	ND		1.0	0.27	ug/L		03/31/25 14:00	04/02/25 15:26	1
Cadmium	0.11	J	1.0	0.077	ug/L		03/31/25 14:00	04/02/25 15:26	1
Calcium	5800		1000	250	ug/L		03/31/25 14:00	04/02/25 15:26	1
Chromium	11		5.0	1.2	ug/L		03/31/25 14:00	04/02/25 15:26	1
Cobalt	1.3		1.0	0.086	ug/L		03/31/25 14:00	04/02/25 15:26	1
Lead	1.8		1.0	0.45	ug/L		03/31/25 14:00	04/02/25 15:26	1
Lithium	27		8.0	3.4	ug/L		03/31/25 14:00	04/02/25 15:26	1
Magnesium	1900		1000	61	ug/L		03/31/25 14:00	04/02/25 15:26	1
Molybdenum	58		5.0	1.1	ug/L		03/31/25 14:00	04/02/25 15:26	1
Potassium	3300		1000	220	ug/L		03/31/25 14:00	04/02/25 15:26	1
Selenium	ND		5.0	0.89	ug/L		03/31/25 14:00	04/02/25 15:26	1
Sodium	670000		1000	880	ug/L		03/31/25 14:00	04/02/25 15:26	1
Thallium	ND		1.0	0.51	ug/L		03/31/25 14:00	04/02/25 15:26	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		03/31/25 14:00	04/01/25 11:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	480	B	5.0	2.6	mg/L			04/02/25 11:22	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	450	B	5.0	2.6	mg/L			04/02/25 11:22	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	31		5.0	2.6	mg/L			04/02/25 11:22	1
Total Dissolved Solids (SM 2540 C-2020)	1600		20	16	mg/L			04/01/25 11:24	1
Chloride (EPA 300.0)	610		10	1.3	mg/L			04/01/25 04:33	10
Fluoride (EPA 300.0)	4.9		0.050	0.024	mg/L			04/01/25 04:24	1
Sulfate (EPA 300.0)	90		1.0	0.35	mg/L			04/01/25 04:24	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.437		0.295	0.297	1.00	0.422	pCi/L	04/03/25 07:32	04/28/25 10:08	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.3*		*30 - 110*	*04/03/25 07:32*	*04/28/25 10:08*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.639	U	0.543	0.546	1.00	0.855	pCi/L	04/03/25 07:37	04/27/25 11:18	1

Client Sample ID: 2016-06-FO-LF-20250326-01
Date Collected: 03/26/25 13:20
Date Received: 03/29/25 08:00

Lab Sample ID: 240-221254-2
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.3*		*30 - 110*	*04/03/25 07:37*	*04/27/25 11:18*	*1*
Y Carrier	*77.8*		*30 - 110*	*04/03/25 07:37*	*04/27/25 11:18*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**1.08**		0.618	0.622	5.00	0.855	pCi/L		04/28/25 13:12	1

Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-221254-1
Project/Site: Federal CCR Wells

Method: 9315 - Radium 226 by GFPC

Matrix: Water **Prep Type: Total/NA**

		Percent Yield (Acceptance Limits)							
		Ba							
Lab Sample ID	Client Sample ID	(30-110)							
240-221254-1	2016-07-FO-LF-20250326-01	87.0							
240-221254-2	2016-06-FO-LF-20250326-01	87.3							
LCS 160-710550/2-A	Lab Control Sample	90.5							
MB 160-710550/1-A	Method Blank	93.6							

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	(30-110)	(30-110)						
240-221254-1	2016-07-FO-LF-20250326-01	87.0	78.5						
240-221254-2	2016-06-FO-LF-20250326-01	87.3	77.8						
LCS 160-710551/2-A	Lab Control Sample	90.5	86.7						
MB 160-710551/1-A	Method Blank	93.6	74.8						

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-650182/1-A
Matrix: Water
Analysis Batch: 650532

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 650182

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		03/31/25 14:00	04/02/25 07:41	1

Lab Sample ID: LCS 240-650182/2-A
Matrix: Water
Analysis Batch: 650532

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 650182

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1000	1090		ug/L		109	80 - 120

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-650182/1-A
Matrix: Water
Analysis Batch: 650678

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 650182

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		03/31/25 14:00	04/02/25 15:06	1
Arsenic	ND		5.0	0.75	ug/L		03/31/25 14:00	04/02/25 15:06	1
Barium	ND		5.0	0.77	ug/L		03/31/25 14:00	04/02/25 15:06	1
Beryllium	ND		1.0	0.27	ug/L		03/31/25 14:00	04/02/25 15:06	1
Cadmium	ND		1.0	0.077	ug/L		03/31/25 14:00	04/02/25 15:06	1
Calcium	ND		1000	250	ug/L		03/31/25 14:00	04/02/25 15:06	1
Chromium	ND		5.0	1.2	ug/L		03/31/25 14:00	04/02/25 15:06	1
Cobalt	ND		1.0	0.086	ug/L		03/31/25 14:00	04/02/25 15:06	1
Lead	ND		1.0	0.45	ug/L		03/31/25 14:00	04/02/25 15:06	1
Lithium	ND		8.0	3.4	ug/L		03/31/25 14:00	04/02/25 15:06	1
Magnesium	ND		1000	61	ug/L		03/31/25 14:00	04/02/25 15:06	1
Molybdenum	ND		5.0	1.1	ug/L		03/31/25 14:00	04/02/25 15:06	1
Potassium	ND		1000	220	ug/L		03/31/25 14:00	04/02/25 15:06	1
Selenium	ND		5.0	0.89	ug/L		03/31/25 14:00	04/02/25 15:06	1
Sodium	ND		1000	880	ug/L		03/31/25 14:00	04/02/25 15:06	1
Thallium	ND		1.0	0.51	ug/L		03/31/25 14:00	04/02/25 15:06	1

Lab Sample ID: LCS 240-650182/3-A
Matrix: Water
Analysis Batch: 650678

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 650182

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	106		ug/L		106	80 - 120
Arsenic	1000	1030		ug/L		103	80 - 120
Barium	1000	1030		ug/L		103	80 - 120
Beryllium	500	525		ug/L		105	80 - 120
Cadmium	500	510		ug/L		102	80 - 120
Calcium	25000	26300		ug/L		105	80 - 120
Chromium	500	516		ug/L		103	80 - 120
Cobalt	500	526		ug/L		105	80 - 120
Lead	500	568		ug/L		114	80 - 120
Lithium	500	560		ug/L		112	80 - 120
Magnesium	25000	26300		ug/L		105	80 - 120

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

Lab Sample ID: LCS 240-650182/3-A
Matrix: Water
Analysis Batch: 650678

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 650182

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Molybdenum	500	512		ug/L		102	80 - 120
Potassium	25000	27000		ug/L		108	80 - 120
Selenium	1000	1040		ug/L		104	80 - 120
Sodium	25000	26100		ug/L		104	80 - 120
Thallium	1000	1180		ug/L		118	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-650184/1-A
Matrix: Water
Analysis Batch: 650462

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 650184

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		03/31/25 14:00	04/01/25 10:55	1

Lab Sample ID: LCS 240-650184/2-A
Matrix: Water
Analysis Batch: 650462

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 650184

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	4.99		ug/L		100	80 - 120

Method: 2320 B-2021 - Alkalinity

Lab Sample ID: MB 240-650639/4
Matrix: Water
Analysis Batch: 650639

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	3.83	J	5.0	2.6	mg/L			04/02/25 10:07	1
Bicarbonate Alkalinity as CaCO3	3.83	J	5.0	2.6	mg/L			04/02/25 10:07	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/02/25 10:07	1

Lab Sample ID: LCS 240-650639/3
Matrix: Water
Analysis Batch: 650639

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	280	268		mg/L		96	86 - 123

Method: 2540 C-2020 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 240-650410/1
Matrix: Water
Analysis Batch: 650410

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	ND		10	7.8	mg/L			04/01/25 11:24	1

Method: 2540 C-2020 - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCS 240-650410/2
Matrix: Water
Analysis Batch: 650410

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			176	172		mg/L		98	80 - 120		

Lab Sample ID: 240-221254-2 DU
Matrix: Water
Analysis Batch: 650410

Client Sample ID: 2016-06-FO-LF-20250326-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	1600			1630		mg/L				0.4	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-650271/3
Matrix: Water
Analysis Batch: 650271

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.13	mg/L			03/31/25 22:54	1
Fluoride	ND		0.050	0.024	mg/L			03/31/25 22:54	1
Sulfate	ND		1.0	0.35	mg/L			03/31/25 22:54	1

Lab Sample ID: LCS 240-650271/4
Matrix: Water
Analysis Batch: 650271

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			50.0	48.9		mg/L		98	90 - 110		
Fluoride			2.50	2.55		mg/L		102	90 - 110		
Sulfate			50.0	48.9		mg/L		98	90 - 110		

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-710550/1-A
Matrix: Water
Analysis Batch: 714984

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 710550

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.04870	U	0.135	0.135	1.00	0.251	pCi/L	04/03/25 07:32	04/28/25 10:07	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.6*		*30 - 110*	*04/03/25 07:32*	*04/28/25 10:07*	*1*

Lab Sample ID: LCS 160-710550/2-A
Matrix: Water
Analysis Batch: 714984

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 710550

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-226			9.58	9.323		1.16	1.00	0.235	pCi/L	97	75 - 125		

Method: 9315 - Radium 226 by GFPC (Continued)

Lab Sample ID: LCS 160-710550/2-A
Matrix: Water
Analysis Batch: 714984

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 710550

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*90.5*		*30 - 110*

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-710551/1-A
Matrix: Water
Analysis Batch: 714821

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 710551

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.2624	U	0.338	0.339	1.00	0.563	pCi/L	04/03/25 07:37	04/27/25 11:18	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.6*		*30 - 110*	*04/03/25 07:37*	*04/27/25 11:18*	*1*
Y Carrier	*74.8*		*30 - 110*	*04/03/25 07:37*	*04/27/25 11:18*	*1*

Lab Sample ID: LCS 160-710551/2-A
Matrix: Water
Analysis Batch: 714821

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 710551

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228			9.50	9.751		1.29	1.00	0.487	pCi/L	103	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*90.5*		*30 - 110*
Y Carrier	*86.7*		*30 - 110*

Metals

Prep Batch: 650182

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-221254-1	2016-07-FO-LF-20250326-01	Total Recoverable	Water	3005A	
240-221254-2	2016-06-FO-LF-20250326-01	Total Recoverable	Water	3005A	
MB 240-650182/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-650182/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-650182/3-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 650184

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-221254-1	2016-07-FO-LF-20250326-01	Total/NA	Water	7470A	
240-221254-2	2016-06-FO-LF-20250326-01	Total/NA	Water	7470A	
MB 240-650184/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-650184/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 650462

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-221254-1	2016-07-FO-LF-20250326-01	Total/NA	Water	7470A	650184
240-221254-2	2016-06-FO-LF-20250326-01	Total/NA	Water	7470A	650184
MB 240-650184/1-A	Method Blank	Total/NA	Water	7470A	650184
LCS 240-650184/2-A	Lab Control Sample	Total/NA	Water	7470A	650184

Analysis Batch: 650532

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-221254-1	2016-07-FO-LF-20250326-01	Total Recoverable	Water	6010D	650182
240-221254-2	2016-06-FO-LF-20250326-01	Total Recoverable	Water	6010D	650182
MB 240-650182/1-A	Method Blank	Total Recoverable	Water	6010D	650182
LCS 240-650182/2-A	Lab Control Sample	Total Recoverable	Water	6010D	650182

Analysis Batch: 650678

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-221254-1	2016-07-FO-LF-20250326-01	Total Recoverable	Water	6020B	650182
240-221254-2	2016-06-FO-LF-20250326-01	Total Recoverable	Water	6020B	650182
MB 240-650182/1-A	Method Blank	Total Recoverable	Water	6020B	650182
LCS 240-650182/3-A	Lab Control Sample	Total Recoverable	Water	6020B	650182

Analysis Batch: 650760

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-221254-1	2016-07-FO-LF-20250326-01	Total Recoverable	Water	6020B	650182

General Chemistry

Analysis Batch: 650271

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-221254-1	2016-07-FO-LF-20250326-01	Total/NA	Water	300.0	
240-221254-1	2016-07-FO-LF-20250326-01	Total/NA	Water	300.0	
240-221254-2	2016-06-FO-LF-20250326-01	Total/NA	Water	300.0	
240-221254-2	2016-06-FO-LF-20250326-01	Total/NA	Water	300.0	
MB 240-650271/3	Method Blank	Total/NA	Water	300.0	
LCS 240-650271/4	Lab Control Sample	Total/NA	Water	300.0	

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-221254-1

General Chemistry

Analysis Batch: 650410

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-221254-1	2016-07-FO-LF-20250326-01	Total/NA	Water	2540 C-2020	
240-221254-2	2016-06-FO-LF-20250326-01	Total/NA	Water	2540 C-2020	
MB 240-650410/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-650410/2	Lab Control Sample	Total/NA	Water	2540 C-2020	
240-221254-2 DU	2016-06-FO-LF-20250326-01	Total/NA	Water	2540 C-2020	

Analysis Batch: 650639

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-221254-1	2016-07-FO-LF-20250326-01	Total/NA	Water	2320 B-2021	
240-221254-2	2016-06-FO-LF-20250326-01	Total/NA	Water	2320 B-2021	
MB 240-650639/4	Method Blank	Total/NA	Water	2320 B-2021	
LCS 240-650639/3	Lab Control Sample	Total/NA	Water	2320 B-2021	

Rad

Prep Batch: 710550

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-221254-1	2016-07-FO-LF-20250326-01	Total/NA	Water	PrecSep-21	
240-221254-2	2016-06-FO-LF-20250326-01	Total/NA	Water	PrecSep-21	
MB 160-710550/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-710550/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 710551

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-221254-1	2016-07-FO-LF-20250326-01	Total/NA	Water	PrecSep_0	
240-221254-2	2016-06-FO-LF-20250326-01	Total/NA	Water	PrecSep_0	
MB 160-710551/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-710551/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Client Sample ID: 2016-07-FO-LF-20250326-01
Lab Sample ID: 240-221254-1

Date Collected: 03/26/25 11:45
Matrix: Water
Date Received: 03/29/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			650182	BN	EET CLE	03/31/25 14:00
Total Recoverable	Analysis	6010D		1	650532	AJC	EET CLE	04/02/25 08:40
Total Recoverable	Prep	3005A			650182	BN	EET CLE	03/31/25 14:00
Total Recoverable	Analysis	6020B		1	650678	S4FJ	EET CLE	04/02/25 15:23
Total Recoverable	Prep	3005A			650182	BN	EET CLE	03/31/25 14:00
Total Recoverable	Analysis	6020B		5	650760	S4FJ	EET CLE	04/03/25 13:34
Total/NA	Prep	7470A			650184	BN	EET CLE	03/31/25 14:00
Total/NA	Analysis	7470A		1	650462	TQ6W	EET CLE	04/01/25 11:07
Total/NA	Analysis	2320 B-2021		1	650639	JMR	EET CLE	04/02/25 11:15
Total/NA	Analysis	2540 C-2020		1	650410	PQD2	EET CLE	04/01/25 11:24
Total/NA	Analysis	300.0		5	650271	JMR	EET CLE	04/01/25 03:48
Total/NA	Analysis	300.0		20	650271	JMR	EET CLE	04/01/25 03:57
Total/NA	Prep	PrecSep-21			710550	OGC	EET SL	04/03/25 07:32
Total/NA	Analysis	9315		1	714984	SWS	EET SL	04/28/25 10:08
Total/NA	Prep	PrecSep_0			710551	OGC	EET SL	04/03/25 07:37
Total/NA	Analysis	9320		1	714821	FLC	EET SL	04/27/25 11:18
Total/NA	Analysis	Ra226_Ra228		1	715010	FLC	EET SL	04/28/25 13:12

Client Sample ID: 2016-06-FO-LF-20250326-01
Lab Sample ID: 240-221254-2

Date Collected: 03/26/25 13:20
Matrix: Water
Date Received: 03/29/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			650182	BN	EET CLE	03/31/25 14:00
Total Recoverable	Analysis	6010D		1	650532	AJC	EET CLE	04/02/25 08:45
Total Recoverable	Prep	3005A			650182	BN	EET CLE	03/31/25 14:00
Total Recoverable	Analysis	6020B		1	650678	S4FJ	EET CLE	04/02/25 15:26
Total/NA	Prep	7470A			650184	BN	EET CLE	03/31/25 14:00
Total/NA	Analysis	7470A		1	650462	TQ6W	EET CLE	04/01/25 11:09
Total/NA	Analysis	2320 B-2021		1	650639	JMR	EET CLE	04/02/25 11:22
Total/NA	Analysis	2540 C-2020		1	650410	PQD2	EET CLE	04/01/25 11:24
Total/NA	Analysis	300.0		1	650271	JMR	EET CLE	04/01/25 04:24
Total/NA	Analysis	300.0		10	650271	JMR	EET CLE	04/01/25 04:33
Total/NA	Prep	PrecSep-21			710550	OGC	EET SL	04/03/25 07:32
Total/NA	Analysis	9315		1	714984	SWS	EET SL	04/28/25 10:08
Total/NA	Prep	PrecSep_0			710551	OGC	EET SL	04/03/25 07:37
Total/NA	Analysis	9320		1	714821	FLC	EET SL	04/27/25 11:18
Total/NA	Analysis	Ra226_Ra228		1	715010	FLC	EET SL	04/28/25 13:12

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

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

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-221254-1
Project/Site: Federal CCR Wells

Laboratory: Eurofins Cleveland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0806	12-31-26
Georgia	State	4062	02-27-26
Illinois	NELAP	200004	08-31-25
Iowa	State	421	06-01-25
Kansas	NELAP	E-10336	01-31-26
Kentucky (UST)	State	112225	02-28-26
Kentucky (WW)	State	KY98016	12-31-25
Minnesota	NELAP	039-999-348	12-31-25
New Hampshire	NELAP	225024	09-30-25
New Jersey	NELAP	OH001	07-03-25
New York	NELAP	10975	04-01-26
North Dakota	State	R-244	02-27-26
Ohio	State	8303	11-04-25
Ohio VAP	State	ORELAP 4062	02-28-26
Oregon	NELAP	4062	02-27-26
Pennsylvania	NELAP	68-00340	08-31-25
Texas	NELAP	T104704517-22-19	08-31-25
US Fish & Wildlife	US Federal Programs	A26406	02-28-26
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	09-14-25
West Virginia DEP	State	210	12-31-25
Wisconsin	State	399167560	08-31-25

Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-25
ANAB	Dept. of Defense ELAP	L2305	04-06-27
ANAB	Dept. of Energy	L2305.01	04-06-27
ANAB	ISO/IEC 17025	L2305	04-06-27
Arizona	State	AZ0813	12-08-25
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-25
Connecticut	State	PH-0241	03-31-25 *
Florida	NELAP	E87689	06-30-25
HI - RadChem Recognition	State	n/a	06-30-25
Illinois	NELAP	200023	11-30-25
Iowa	State	373	12-01-26
Kansas	NELAP	E-10236	10-31-25
Kentucky (DW)	State	KY90125	12-31-25
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-25
Louisiana (All)	NELAP	106151	06-30-25
Louisiana (DW)	State	LA011	12-31-25
Maryland	State	310	09-30-25
Massachusetts	State	M-MO054	06-30-25
MI - RadChem Recognition	State	9005	06-30-25
Missouri	State	780	06-30-25
Nevada	State	MO00054	07-31-25

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-221254-1
Project/Site: Federal CCR Wells

Laboratory: Eurofins St. Louis (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New Jersey	NELAP	MO002	06-30-25
New Mexico	State	MO00054	06-30-25
New York	NELAP	11616	03-31-26
North Carolina (DW)	State	29700	07-31-25
North Dakota	State	R-207	06-30-25
Oklahoma	NELAP	9997	08-31-25
Oregon	NELAP	4157	09-01-25
Pennsylvania	NELAP	68-00540	02-28-26
South Carolina	State	85002	06-30-25
Texas	NELAP	T104704193	07-31-25
US Fish & Wildlife	US Federal Programs	058448	07-31-25
USDA	US Federal Programs	525-23-138-94730	05-18-26
Utah	NELAP	MO00054	07-31-25
Virginia	NELAP	460230	06-14-25
Washington	State	C592	08-30-25
West Virginia DEP	State	381	10-31-25

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

3.7/4-8

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Environment Testing

Client Information	Sampler: Bobby Castle	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s):	COC No.: 240-111832-39818.1
Client Contact: Taylor Huffman	Phone: 740-33-4308	E-Mail: roxanne.cisneros@et.eurofinsus.com	State of Origin:	Page: Page 1 of 8
Company: Lightstone Generation Gavin Power LLC	PWSID	Analysis Requested		Job #:
Address: 7397 OH-7	Due Date Requested:			Preservation Codes: A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify), Other:
City: Cheshire	TAT Requested (days):			
State, Zip: OH, 45620	Compliance Project: Δ Yes Δ No			
Phone: 740-925-3171(Tel)	PO #: 2935505			
Email: taylor.huffman@lightstonegen.com	WO #:			
Project Name: Gavin CCR	Project #: 24019633			
Site: Gavin	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B, 6020, 7470A	2540C_Calcd - TDS	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	300.0_28D - Chloride, Fluoride & Sulfate	2320B - (MOD) Alkalinity	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	N	D	N	N		
2016-07-FO-LF-20250326-01	3-26-25	1145	G	Water			1	1	2	1	1		
2016-06-FO-LF-20250326-01	3-26-25	1320	G	Water			1	1	2	1	1		
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									

240-221254 COC

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	[signature]	3-28-25 0930	Eurofins	[signature]	3/28/25 4:10	Lab
2	[signature]	3/28/25 8:10		[signature] Martin	3/29/25 800	EUL
3						

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins – Cleveland Sample Receipt Form/Narrative Login # :
Barberton Facility

Client Lightstone Gavin Site Name

Cooler Received on 3/29/25 Opened on 3/29/25

Cooler unpacked by: KMartin

FedEx: 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other

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

Eurofins Cooler # EC 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 # 21 (CF +1.1 °C) Observed Cooler Temp 3.7 °C Corrected Cooler Temp. 4.8 °C

2.	Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1(2)	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# HC448976
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

3/29/2025

Login Container Summary Report

240-221254

4/28/2025

Temperature readings _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
2016-07-FO-LF-20250326-01	240-221254-A-1	Plastic 60 mL - unpreserved				
2016-07-FO-LF-20250326-01	240-221254-B-1	Plastic 60 mL - unpreserved				
2016-07-FO-LF-20250326-01	240-221254-C-1	Plastic 500ml - unpreserved				
2016-07-FO-LF-20250326-01	240-221254-D-1	Plastic 500ml - with Nitric Acid	<2			
2016-07-FO-LF-20250326-01	240-221254-E-1	Plastic 1 liter - Nitric Acid	<2			
2016-07-FO-LF-20250326-01	240-221254-F-1	Plastic 1 liter - Nitric Acid	<2			
2016-06-FO-LF-20250326-01	240-221254-A-2	Plastic 60 mL - unpreserved				
2016-06-FO-LF-20250326-01	240-221254-B-2	Plastic 60 mL - unpreserved				
2016-06-FO-LF-20250326-01	240-221254-C-2	Plastic 500ml - unpreserved				
2016-06-FO-LF-20250326-01	240-221254-D-2	Plastic 500ml - with Nitric Acid	<2			
2016-06-FO-LF-20250326-01	240-221254-E-2	Plastic 1 liter - Nitric Acid	<2			
2016-06-FO-LF-20250326-01	240-221254-F-2	Plastic 1 liter - Nitric Acid	<2			

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s): N/A	COC No: 240-200538.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: roxanne.cisneros@et.eurofinsus.com	State of Origin: Ohio	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): N/A		Job #: 240-221254-1
Address: 13715 Rider Trail North,	Due Date Requested: 4/14/2025			
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Federal GWM Wells	Project #: 24019633			
Site: N/A	SSOW#: N/A			

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9320_Ra228/PrecSep_0 Radium-228 (GFPC)	9315_Ra226/PrecSep_21 Radium-226 (GFPC)	Ra226Ra228_GFPC/ Combined Radium-226 and Radium-228	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
2016-07-FO-LF-20250326-01 (240-221254-1)	3/26/25	11:45 Eastern	G	Water			X	X	X	2	
2016-06-FO-LF-20250326-01 (240-221254-2)	3/26/25	13:20 Eastern	G	Water			X	X	X	2	

Analysis Requested

Preservation Codes: -

Other: N/A

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

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

Relinquished by: MALISSA LOAR	Date/Time: 3-31-25 9Am	Company	Received by: M. Pinette	Date/Time: APR 0 1 2025 0840	Company
Relinquished by:	Date/Time:	Company	Received by: Meadow Pinette	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: 10/10/2024

Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-221254-1

Login Number: 221254
List Number: 2
Creator: Pinette, Meadow L

List Source: Eurofins St. Louis
List Creation: 04/01/25 10:49 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?	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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620

Generated 4/28/2025 3:23:33 PM

JOB DESCRIPTION

Federal CCR Wells

JOB NUMBER

240-221258-1

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

myEOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization

Roxanne Cisneros

Generated
4/28/2025 3:23:33 PM

Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(330)497-9396

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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-221258-1

Qualifiers

Metals

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

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: 240-221258-1 — Eurofins Cleveland

Job Narrative
240-221258-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 3/29/2025 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice.

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

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

Gas Flow Proportional Counter
Method 9320_Ra228: Radium-228 batch 710551
The detection goal was not met for the following sample due to the reduced sample volume attributed to the presence of matrix interferences: 94139-FO-LF-20250327-01 (240-221258-1). Analytical results are reported with the detection limit achieved.

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

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

Method Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-221258-1
Project/Site: Federal CCR Wells

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CLE
6020B	Metals (ICP/MS)	SW846	EET CLE
7470A	Mercury (CVAA)	SW846	EET CLE
2320 B-2021	Alkalinity	SM	EET CLE
2540 C-2020	Solids, Total Dissolved (TDS)	SM	EET CLE
300.0	Anions, Ion Chromatography	EPA	EET CLE
9315	Radium 226 by GFPC	SW846	EET SL
9320	Radium-228 (GFPC)	SW846	EET SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	EET SL
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CLE
7470A	Preparation, Mercury	SW846	EET CLE
PrecSep_0	Preparation, Precipitate Separation	None	EET SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	EET SL

Protocol References:

EPA = US Environmental Protection Agency

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:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

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

Sample Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-221258-1
Project/Site: Federal CCR Wells

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-221258-1	94139-FO-LF-20250327-01	Water	03/27/25 10:35	03/29/25 08:00
240-221258-2	9801-FO-LF-20250327-01	Water	03/27/25 12:10	03/29/25 08:00

Detection Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-221258-1

Client Sample ID: 94139-FO-LF-20250327-01

Lab Sample ID: 240-221258-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	550		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	5.5		5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	190		5.0	0.77	ug/L	1		6020B	Total Recoverable
Beryllium	0.77	J	1.0	0.27	ug/L	1		6020B	Total Recoverable
Cadmium	0.11	J	1.0	0.077	ug/L	1		6020B	Total Recoverable
Calcium	12000		1000	250	ug/L	1		6020B	Total Recoverable
Chromium	87		5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	250		1.0	0.086	ug/L	1		6020B	Total Recoverable
Lead	7.5		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	25		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	5000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	200		5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	2700		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	560000		1000	880	ug/L	1		6020B	Total Recoverable
Total Alkalinity	490		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	470		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Carbonate Alkalinity as CaCO3	26		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	1500		20	16	mg/L	1		2540 C-2020	Total/NA
Chloride	470		10	1.3	mg/L	10		300.0	Total/NA
Fluoride	4.2		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	58		1.0	0.35	mg/L	1		300.0	Total/NA

Client Sample ID: 9801-FO-LF-20250327-01

Lab Sample ID: 240-221258-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	430		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	1.2	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	5500		5.0	0.77	ug/L	1		6020B	Total Recoverable
Cadmium	0.090	J	1.0	0.077	ug/L	1		6020B	Total Recoverable
Calcium	220000		1000	250	ug/L	1		6020B	Total Recoverable
Chromium	2.4	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	1.6		1.0	0.086	ug/L	1		6020B	Total Recoverable
Lead	0.69	J	1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	130		8.0	3.4	ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: 9801-FO-LF-20250327-01 (Continued)
Lab Sample ID: 240-221258-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	60000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	4.3	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	9600		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	4900000		10000	8800	ug/L	10		6020B	Total Recoverable
Total Alkalinity	140		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	140		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	13000		100	78	mg/L	1		2540 C-2020	Total/NA
Chloride	9100		100	13	mg/L	100		300.0	Total/NA
Fluoride	0.96		0.50	0.24	mg/L	10		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 94139-FO-LF-20250327-01
Date Collected: 03/27/25 10:35
Date Received: 03/29/25 08:00

Lab Sample ID: 240-221258-1
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	550		100	57	ug/L		03/31/25 14:00	04/02/25 08:58	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		03/31/25 14:00	04/02/25 15:28	1
Arsenic	5.5		5.0	0.75	ug/L		03/31/25 14:00	04/02/25 15:28	1
Barium	190		5.0	0.77	ug/L		03/31/25 14:00	04/02/25 15:28	1
Beryllium	0.77	J	1.0	0.27	ug/L		03/31/25 14:00	04/02/25 15:28	1
Cadmium	0.11	J	1.0	0.077	ug/L		03/31/25 14:00	04/02/25 15:28	1
Calcium	12000		1000	250	ug/L		03/31/25 14:00	04/02/25 15:28	1
Chromium	87		5.0	1.2	ug/L		03/31/25 14:00	04/02/25 15:28	1
Cobalt	250		1.0	0.086	ug/L		03/31/25 14:00	04/02/25 15:28	1
Lead	7.5		1.0	0.45	ug/L		03/31/25 14:00	04/02/25 15:28	1
Lithium	25		8.0	3.4	ug/L		03/31/25 14:00	04/02/25 15:28	1
Magnesium	5000		1000	61	ug/L		03/31/25 14:00	04/02/25 15:28	1
Molybdenum	200		5.0	1.1	ug/L		03/31/25 14:00	04/02/25 15:28	1
Potassium	2700		1000	220	ug/L		03/31/25 14:00	04/02/25 15:28	1
Selenium	ND		5.0	0.89	ug/L		03/31/25 14:00	04/02/25 15:28	1
Sodium	560000		1000	880	ug/L		03/31/25 14:00	04/02/25 15:28	1
Thallium	ND		1.0	0.51	ug/L		03/31/25 14:00	04/02/25 15:28	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		03/31/25 14:00	04/01/25 11:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	490		5.0	2.6	mg/L			04/02/25 14:08	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	470		5.0	2.6	mg/L			04/02/25 14:08	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	26		5.0	2.6	mg/L			04/02/25 14:08	1
Total Dissolved Solids (SM 2540 C-2020)	1500		20	16	mg/L			04/03/25 08:38	1
Chloride (EPA 300.0)	470		10	1.3	mg/L			04/01/25 04:52	10
Fluoride (EPA 300.0)	4.2		0.050	0.024	mg/L			04/01/25 04:43	1
Sulfate (EPA 300.0)	58		1.0	0.35	mg/L			04/01/25 04:43	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.240	U	0.413	0.413	1.00	0.723	pCi/L	04/03/25 07:32	04/28/25 10:08	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*61.9*		*30 - 110*	*04/03/25 07:32*	*04/28/25 10:08*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.17	U G	1.07	1.07	1.00	1.70	pCi/L	04/03/25 07:37	04/27/25 11:19	1

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-221258-1

Client Sample ID: 94139-FO-LF-20250327-01
Date Collected: 03/27/25 10:35
Date Received: 03/29/25 08:00

Lab Sample ID: 240-221258-1
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*61.9*		*30 - 110*	*04/03/25 07:37*	*04/27/25 11:19*	*1*
Y Carrier	*77.8*		*30 - 110*	*04/03/25 07:37*	*04/27/25 11:19*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.41	U	1.15	1.15	5.00	1.70	pCi/L		04/28/25 13:12	1

Client Sample ID: 9801-FO-LF-20250327-01
Date Collected: 03/27/25 12:10
Date Received: 03/29/25 08:00

Lab Sample ID: 240-221258-2
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**430**		100	57	ug/L		03/31/25 14:00	04/02/25 09:02	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		03/31/25 14:00	04/02/25 15:36	1
Arsenic	**1.2**	**J**	5.0	0.75	ug/L		03/31/25 14:00	04/02/25 15:36	1
Barium	**5500**		5.0	0.77	ug/L		03/31/25 14:00	04/02/25 15:36	1
Beryllium	ND		1.0	0.27	ug/L		03/31/25 14:00	04/02/25 15:36	1
Cadmium	**0.090**	**J**	1.0	0.077	ug/L		03/31/25 14:00	04/02/25 15:36	1
Calcium	**220000**		1000	250	ug/L		03/31/25 14:00	04/02/25 15:36	1
Chromium	**2.4**	**J**	5.0	1.2	ug/L		03/31/25 14:00	04/02/25 15:36	1
Cobalt	**1.6**		1.0	0.086	ug/L		03/31/25 14:00	04/02/25 15:36	1
Lead	**0.69**	**J**	1.0	0.45	ug/L		03/31/25 14:00	04/02/25 15:36	1
Lithium	**130**		8.0	3.4	ug/L		03/31/25 14:00	04/02/25 15:36	1
Magnesium	**60000**		1000	61	ug/L		03/31/25 14:00	04/02/25 15:36	1
Molybdenum	**4.3**	**J**	5.0	1.1	ug/L		03/31/25 14:00	04/02/25 15:36	1
Potassium	**9600**		1000	220	ug/L		03/31/25 14:00	04/02/25 15:36	1
Selenium	ND		5.0	0.89	ug/L		03/31/25 14:00	04/02/25 15:36	1
Sodium	**4900000**		10000	8800	ug/L		03/31/25 14:00	04/03/25 13:37	10
Thallium	ND		1.0	0.51	ug/L		03/31/25 14:00	04/02/25 15:36	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		03/31/25 14:00	04/01/25 11:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	**140**		5.0	2.6	mg/L			04/02/25 14:15	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**140**		5.0	2.6	mg/L			04/02/25 14:15	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			04/02/25 14:15	1
Total Dissolved Solids (SM 2540 C-2020)	**13000**		100	78	mg/L			04/03/25 08:38	1
Chloride (EPA 300.0)	**9100**		100	13	mg/L			04/01/25 05:10	100
Fluoride (EPA 300.0)	**0.96**		0.50	0.24	mg/L			04/01/25 05:01	10
Sulfate (EPA 300.0)	ND		10	3.5	mg/L			04/01/25 05:01	10

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**3.46**		0.471	0.565	1.00	0.225	pCi/L	04/03/25 07:32	04/28/25 10:08	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*107*		*30 - 110*	*04/03/25 07:32*	*04/28/25 10:08*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**6.78**		0.788	1.00	1.00	0.505	pCi/L	04/03/25 07:37	04/27/25 11:19	1

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-221258-1

Client Sample ID: 9801-FO-LF-20250327-01
Date Collected: 03/27/25 12:10
Date Received: 03/29/25 08:00

Lab Sample ID: 240-221258-2
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*107*		*30 - 110*	*04/03/25 07:37*	*04/27/25 11:19*	*1*
Y Carrier	*74.0*		*30 - 110*	*04/03/25 07:37*	*04/27/25 11:19*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**10.2**		0.918	1.15	5.00	0.505	pCi/L		04/28/25 13:12	1

Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-221258-1

Method: 9315 - Radium 226 by GFPC

Matrix: Water **Prep Type: Total/NA**

		Percent Yield (Acceptance Limits)							
		Ba							
Lab Sample ID	Client Sample ID	(30-110)							
240-221258-1	94139-FO-LF-20250327-01	61.9							
240-221258-2	9801-FO-LF-20250327-01	107							
LCS 160-710550/2-A	Lab Control Sample	90.5							
MB 160-710550/1-A	Method Blank	93.6							

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	(30-110)	(30-110)						
240-221258-1	94139-FO-LF-20250327-01	61.9	77.8						
240-221258-2	9801-FO-LF-20250327-01	107	74.0						
LCS 160-710551/2-A	Lab Control Sample	90.5	86.7						
MB 160-710551/1-A	Method Blank	93.6	74.8						

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-650182/1-A
Matrix: Water
Analysis Batch: 650532

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 650182

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		03/31/25 14:00	04/02/25 07:41	1

Lab Sample ID: LCS 240-650182/2-A
Matrix: Water
Analysis Batch: 650532

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 650182

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1000	1090		ug/L		109	80 - 120

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-650182/1-A
Matrix: Water
Analysis Batch: 650678

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 650182

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		03/31/25 14:00	04/02/25 15:06	1
Arsenic	ND		5.0	0.75	ug/L		03/31/25 14:00	04/02/25 15:06	1
Barium	ND		5.0	0.77	ug/L		03/31/25 14:00	04/02/25 15:06	1
Beryllium	ND		1.0	0.27	ug/L		03/31/25 14:00	04/02/25 15:06	1
Cadmium	ND		1.0	0.077	ug/L		03/31/25 14:00	04/02/25 15:06	1
Calcium	ND		1000	250	ug/L		03/31/25 14:00	04/02/25 15:06	1
Chromium	ND		5.0	1.2	ug/L		03/31/25 14:00	04/02/25 15:06	1
Cobalt	ND		1.0	0.086	ug/L		03/31/25 14:00	04/02/25 15:06	1
Lead	ND		1.0	0.45	ug/L		03/31/25 14:00	04/02/25 15:06	1
Lithium	ND		8.0	3.4	ug/L		03/31/25 14:00	04/02/25 15:06	1
Magnesium	ND		1000	61	ug/L		03/31/25 14:00	04/02/25 15:06	1
Molybdenum	ND		5.0	1.1	ug/L		03/31/25 14:00	04/02/25 15:06	1
Potassium	ND		1000	220	ug/L		03/31/25 14:00	04/02/25 15:06	1
Selenium	ND		5.0	0.89	ug/L		03/31/25 14:00	04/02/25 15:06	1
Sodium	ND		1000	880	ug/L		03/31/25 14:00	04/02/25 15:06	1
Thallium	ND		1.0	0.51	ug/L		03/31/25 14:00	04/02/25 15:06	1

Lab Sample ID: LCS 240-650182/3-A
Matrix: Water
Analysis Batch: 650678

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 650182

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	106		ug/L		106	80 - 120
Arsenic	1000	1030		ug/L		103	80 - 120
Barium	1000	1030		ug/L		103	80 - 120
Beryllium	500	525		ug/L		105	80 - 120
Cadmium	500	510		ug/L		102	80 - 120
Calcium	25000	26300		ug/L		105	80 - 120
Chromium	500	516		ug/L		103	80 - 120
Cobalt	500	526		ug/L		105	80 - 120
Lead	500	568		ug/L		114	80 - 120
Lithium	500	560		ug/L		112	80 - 120
Magnesium	25000	26300		ug/L		105	80 - 120

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

Lab Sample ID: LCS 240-650182/3-A
Matrix: Water
Analysis Batch: 650678

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 650182

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Molybdenum	500	512		ug/L		102	80 - 120
Potassium	25000	27000		ug/L		108	80 - 120
Selenium	1000	1040		ug/L		104	80 - 120
Sodium	25000	26100		ug/L		104	80 - 120
Thallium	1000	1180		ug/L		118	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-650184/1-A
Matrix: Water
Analysis Batch: 650462

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 650184

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		03/31/25 14:00	04/01/25 10:55	1

Lab Sample ID: LCS 240-650184/2-A
Matrix: Water
Analysis Batch: 650462

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 650184

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	4.99		ug/L		100	80 - 120

Method: 2320 B-2021 - Alkalinity

Lab Sample ID: MB 240-650639/30
Matrix: Water
Analysis Batch: 650639

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	ND		5.0	2.6	mg/L			04/02/25 12:27	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/02/25 12:27	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/02/25 12:27	1

Lab Sample ID: MB 240-650639/4
Matrix: Water
Analysis Batch: 650639

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	3.83	J	5.0	2.6	mg/L			04/02/25 10:07	1
Bicarbonate Alkalinity as CaCO3	3.83	J	5.0	2.6	mg/L			04/02/25 10:07	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/02/25 10:07	1

Lab Sample ID: LCS 240-650639/29
Matrix: Water
Analysis Batch: 650639

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	280	268		mg/L		96	86 - 123

Method: 2540 C-2020 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 240-650689/1
Matrix: Water
Analysis Batch: 650689

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	ND		10	7.8	mg/L			04/03/25 08:38	1

Lab Sample ID: LCS 240-650689/2
Matrix: Water
Analysis Batch: 650689

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	176	153		mg/L		87	80 - 120

Lab Sample ID: 240-221258-1 DU
Matrix: Water
Analysis Batch: 650689

Client Sample ID: 94139-FO-LF-20250327-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	1500		1410		mg/L		5	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-650271/3
Matrix: Water
Analysis Batch: 650271

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.13	mg/L			03/31/25 22:54	1
Fluoride	ND		0.050	0.024	mg/L			03/31/25 22:54	1
Sulfate	ND		1.0	0.35	mg/L			03/31/25 22:54	1

Lab Sample ID: LCS 240-650271/4
Matrix: Water
Analysis Batch: 650271

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	48.9		mg/L		98	90 - 110
Fluoride	2.50	2.55		mg/L		102	90 - 110
Sulfate	50.0	48.9		mg/L		98	90 - 110

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-710550/1-A
Matrix: Water
Analysis Batch: 714984

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 710550

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.04870	U	0.135	0.135	1.00	0.251	pCi/L	04/03/25 07:32	04/28/25 10:07	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.6*		*30 - 110*	*04/03/25 07:32*	*04/28/25 10:07*	*1*

Method: 9315 - Radium 226 by GFPC (Continued)

Lab Sample ID: LCS 160-710550/2-A
Matrix: Water
Analysis Batch: 714984

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 710550

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-226			9.58	9.323		1.16	1.00	0.235	pCi/L	97	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*90.5*		*30 - 110*

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-710551/1-A
Matrix: Water
Analysis Batch: 714821

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 710551

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.2624	U	0.338	0.339	1.00	0.563	pCi/L	04/03/25 07:37	04/27/25 11:18	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.6*		*30 - 110*	*04/03/25 07:37*	*04/27/25 11:18*	*1*
Y Carrier	*74.8*		*30 - 110*	*04/03/25 07:37*	*04/27/25 11:18*	*1*

Lab Sample ID: LCS 160-710551/2-A
Matrix: Water
Analysis Batch: 714821

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 710551

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228			9.50	9.751		1.29	1.00	0.487	pCi/L	103	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*90.5*		*30 - 110*
Y Carrier	*86.7*		*30 - 110*

Metals

Prep Batch: 650182

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-221258-1	94139-FO-LF-20250327-01	Total Recoverable	Water	3005A	
240-221258-2	9801-FO-LF-20250327-01	Total Recoverable	Water	3005A	
MB 240-650182/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-650182/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-650182/3-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 650184

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-221258-1	94139-FO-LF-20250327-01	Total/NA	Water	7470A	
240-221258-2	9801-FO-LF-20250327-01	Total/NA	Water	7470A	
MB 240-650184/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-650184/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 650462

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-221258-1	94139-FO-LF-20250327-01	Total/NA	Water	7470A	650184
240-221258-2	9801-FO-LF-20250327-01	Total/NA	Water	7470A	650184
MB 240-650184/1-A	Method Blank	Total/NA	Water	7470A	650184
LCS 240-650184/2-A	Lab Control Sample	Total/NA	Water	7470A	650184

Analysis Batch: 650532

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-221258-1	94139-FO-LF-20250327-01	Total Recoverable	Water	6010D	650182
240-221258-2	9801-FO-LF-20250327-01	Total Recoverable	Water	6010D	650182
MB 240-650182/1-A	Method Blank	Total Recoverable	Water	6010D	650182
LCS 240-650182/2-A	Lab Control Sample	Total Recoverable	Water	6010D	650182

Analysis Batch: 650678

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-221258-1	94139-FO-LF-20250327-01	Total Recoverable	Water	6020B	650182
240-221258-2	9801-FO-LF-20250327-01	Total Recoverable	Water	6020B	650182
MB 240-650182/1-A	Method Blank	Total Recoverable	Water	6020B	650182
LCS 240-650182/3-A	Lab Control Sample	Total Recoverable	Water	6020B	650182

Analysis Batch: 650760

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-221258-2	9801-FO-LF-20250327-01	Total Recoverable	Water	6020B	650182

General Chemistry

Analysis Batch: 650271

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-221258-1	94139-FO-LF-20250327-01	Total/NA	Water	300.0	
240-221258-1	94139-FO-LF-20250327-01	Total/NA	Water	300.0	
240-221258-2	9801-FO-LF-20250327-01	Total/NA	Water	300.0	
240-221258-2	9801-FO-LF-20250327-01	Total/NA	Water	300.0	
MB 240-650271/3	Method Blank	Total/NA	Water	300.0	
LCS 240-650271/4	Lab Control Sample	Total/NA	Water	300.0	

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-221258-1

General Chemistry

Analysis Batch: 650639

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-221258-1	94139-FO-LF-20250327-01	Total/NA	Water	2320 B-2021	
240-221258-2	9801-FO-LF-20250327-01	Total/NA	Water	2320 B-2021	
MB 240-650639/30	Method Blank	Total/NA	Water	2320 B-2021	
MB 240-650639/4	Method Blank	Total/NA	Water	2320 B-2021	
LCS 240-650639/29	Lab Control Sample	Total/NA	Water	2320 B-2021	

Analysis Batch: 650689

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-221258-1	94139-FO-LF-20250327-01	Total/NA	Water	2540 C-2020	
240-221258-2	9801-FO-LF-20250327-01	Total/NA	Water	2540 C-2020	
MB 240-650689/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-650689/2	Lab Control Sample	Total/NA	Water	2540 C-2020	
240-221258-1 DU	94139-FO-LF-20250327-01	Total/NA	Water	2540 C-2020	

Rad

Prep Batch: 710550

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-221258-1	94139-FO-LF-20250327-01	Total/NA	Water	PrecSep-21	
240-221258-2	9801-FO-LF-20250327-01	Total/NA	Water	PrecSep-21	
MB 160-710550/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-710550/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 710551

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-221258-1	94139-FO-LF-20250327-01	Total/NA	Water	PrecSep_0	
240-221258-2	9801-FO-LF-20250327-01	Total/NA	Water	PrecSep_0	
MB 160-710551/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-710551/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-221258-1

Client Sample ID: 94139-FO-LF-20250327-01

Lab Sample ID: 240-221258-1

Date Collected: 03/27/25 10:35
Matrix: Water
Date Received: 03/29/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			650182	BN	EET CLE	03/31/25 14:00
Total Recoverable	Analysis	6010D		1	650532	AJC	EET CLE	04/02/25 08:58
Total Recoverable	Prep	3005A			650182	BN	EET CLE	03/31/25 14:00
Total Recoverable	Analysis	6020B		1	650678	S4FJ	EET CLE	04/02/25 15:28
Total/NA	Prep	7470A			650184	BN	EET CLE	03/31/25 14:00
Total/NA	Analysis	7470A		1	650462	TQ6W	EET CLE	04/01/25 11:14
Total/NA	Analysis	2320 B-2021		1	650639	JMR	EET CLE	04/02/25 14:08
Total/NA	Analysis	2540 C-2020		1	650689	C5SV	EET CLE	04/03/25 08:38
Total/NA	Analysis	300.0		1	650271	JMR	EET CLE	04/01/25 04:43
Total/NA	Analysis	300.0		10	650271	JMR	EET CLE	04/01/25 04:52
Total/NA	Prep	PrecSep-21			710550	OGC	EET SL	04/03/25 07:32
Total/NA	Analysis	9315		1	714984	SWS	EET SL	04/28/25 10:08
Total/NA	Prep	PrecSep_0			710551	OGC	EET SL	04/03/25 07:37
Total/NA	Analysis	9320		1	714821	FLC	EET SL	04/27/25 11:19
Total/NA	Analysis	Ra226_Ra228		1	715010	FLC	EET SL	04/28/25 13:12

Client Sample ID: 9801-FO-LF-20250327-01

Lab Sample ID: 240-221258-2

Date Collected: 03/27/25 12:10
Matrix: Water
Date Received: 03/29/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			650182	BN	EET CLE	03/31/25 14:00
Total Recoverable	Analysis	6010D		1	650532	AJC	EET CLE	04/02/25 09:02
Total Recoverable	Prep	3005A			650182	BN	EET CLE	03/31/25 14:00
Total Recoverable	Analysis	6020B		1	650678	S4FJ	EET CLE	04/02/25 15:36
Total Recoverable	Prep	3005A			650182	BN	EET CLE	03/31/25 14:00
Total Recoverable	Analysis	6020B		10	650760	S4FJ	EET CLE	04/03/25 13:37
Total/NA	Prep	7470A			650184	BN	EET CLE	03/31/25 14:00
Total/NA	Analysis	7470A		1	650462	TQ6W	EET CLE	04/01/25 11:16
Total/NA	Analysis	2320 B-2021		1	650639	JMR	EET CLE	04/02/25 14:15
Total/NA	Analysis	2540 C-2020		1	650689	C5SV	EET CLE	04/03/25 08:38
Total/NA	Analysis	300.0		10	650271	JMR	EET CLE	04/01/25 05:01
Total/NA	Analysis	300.0		100	650271	JMR	EET CLE	04/01/25 05:10
Total/NA	Prep	PrecSep-21			710550	OGC	EET SL	04/03/25 07:32
Total/NA	Analysis	9315		1	714984	SWS	EET SL	04/28/25 10:08
Total/NA	Prep	PrecSep_0			710551	OGC	EET SL	04/03/25 07:37
Total/NA	Analysis	9320		1	714821	FLC	EET SL	04/27/25 11:19
Total/NA	Analysis	Ra226_Ra228		1	715010	FLC	EET SL	04/28/25 13:12

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

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

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-221258-1
Project/Site: Federal CCR Wells

Laboratory: Eurofins Cleveland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0806	12-31-26
Georgia	State	4062	02-27-26
Illinois	NELAP	200004	08-31-25
Iowa	State	421	06-01-25
Kansas	NELAP	E-10336	01-31-26
Kentucky (UST)	State	112225	02-28-26
Kentucky (WW)	State	KY98016	12-31-25
Minnesota	NELAP	039-999-348	12-31-25
New Hampshire	NELAP	225024	09-30-25
New Jersey	NELAP	OH001	07-03-25
New York	NELAP	10975	04-01-26
North Dakota	State	R-244	02-27-26
Ohio	State	8303	11-04-25
Ohio VAP	State	ORELAP 4062	02-28-26
Oregon	NELAP	4062	02-27-26
Pennsylvania	NELAP	68-00340	08-31-25
Texas	NELAP	T104704517-22-19	08-31-25
US Fish & Wildlife	US Federal Programs	A26406	02-28-26
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	09-14-25
West Virginia DEP	State	210	12-31-25
Wisconsin	State	399167560	08-31-25

Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-25
ANAB	Dept. of Defense ELAP	L2305	04-06-27
ANAB	Dept. of Energy	L2305.01	04-06-27
ANAB	ISO/IEC 17025	L2305	04-06-27
Arizona	State	AZ0813	12-08-25
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-25
Connecticut	State	PH-0241	03-31-25 *
Florida	NELAP	E87689	06-30-25
HI - RadChem Recognition	State	n/a	06-30-25
Illinois	NELAP	200023	11-30-25
Iowa	State	373	12-01-26
Kansas	NELAP	E-10236	10-31-25
Kentucky (DW)	State	KY90125	12-31-25
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-25
Louisiana (All)	NELAP	106151	06-30-25
Louisiana (DW)	State	LA011	12-31-25
Maryland	State	310	09-30-25
Massachusetts	State	M-MO054	06-30-25
MI - RadChem Recognition	State	9005	06-30-25
Missouri	State	780	06-30-25
Nevada	State	MO00054	07-31-25

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-221258-1
Project/Site: Federal CCR Wells

Laboratory: Eurofins St. Louis (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New Jersey	NELAP	MO002	06-30-25
New Mexico	State	MO00054	06-30-25
New York	NELAP	11616	03-31-26
North Carolina (DW)	State	29700	07-31-25
North Dakota	State	R-207	06-30-25
Oklahoma	NELAP	9997	08-31-25
Oregon	NELAP	4157	09-01-25
Pennsylvania	NELAP	68-00540	02-28-26
South Carolina	State	85002	06-30-25
Texas	NELAP	T104704193	07-31-25
US Fish & Wildlife	US Federal Programs	058448	07-31-25
USDA	US Federal Programs	525-23-138-94730	05-18-26
Utah	NELAP	MO00054	07-31-25
Virginia	NELAP	460230	06-14-25
Washington	State	C592	08-30-25
West Virginia DEP	State	381	10-31-25

3.7/4-8

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins
Environment Testing

Client Information	Sampler: Bobby Custer	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s):	COC No.: 240-111832-39818.1
Client Contact: Taylor Huffman	Phone: 740-373-4308	E-Mail: roxanne.cisneros@et.eurofinsus.com	State of Origin:	Page: Page 1 of 8
Company: Lightstone Generation Gavin Power LLC	PWSID			Job #:
Address: 7397 OH-7	Due Date Requested:			
City: Cheshire	TAT Requested (days):			
State, Zip: OH, 45620	Compliance Project: Δ Yes Δ No			
Phone: 740-925-3171(Tel)	PO #: 2935505			
Email: taylor.huffman@lightstonegen.com	WO #			
Project Name: Gavin CCR	Project #: 24019633			
Site: Gavin	SSOW#			

Analysis Requested

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B, 6020, 7470A	2540C_Calcd - TDS	9315_Ra228, 9320_Ra228, Ra226Ra228_GFPC	300.0_28D - Chloride, Fluoride & Sulfate	2320B - (MOD) Alkalinity	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	N	D	N	N		
94139-FO-LF-20250327-01	3-27-25	1035	G	Water			1	1	2	1	1		
9801-FO-LF-20250327-01	3-27-25	1210	G	Water			1	1	2	1	1		
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									

240-221258 COC

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
Bobby Custer	3-28-25/0930	KEMRON	Taylor	3/28/25 4:10P	USR
Taylor	3/28/25 8:10		Martin	3/29/25 8:00	EUR

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins – Cleveland Sample Receipt Form/Narrative **Login # :** _____
Barberton Facility

Client Lightstone Gavin Site Name _____ Cooler unpacked by KMartin
Cooler Received on 3/29/25 Opened on 3/29/25
FedEx. 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other _____
Receipt After-hours Drop-off Date/Time _____ Storage Location _____
Eurofins Cooler # EC 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 # 21 (CF +1.1 °C) Observed Cooler Temp 3.7 °C Corrected Cooler Temp 4.8 °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1(4)	Yes (No)	**Tests that are not checked for pH by Receiving:** VOAs Oil and Grease TOC
-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# HC448976
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)	

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. _____

3/29/2025

Login Container Summary Report

240-221258

4/28/2025

Temperature readings _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
94139-FO-LF-20250327-01	240-221258-A-1	Plastic 60 mL - unpreserved				
94139-FO-LF-20250327-01	240-221258-B-1	Plastic 60 mL - unpreserved				
94139-FO-LF-20250327-01	240-221258-C-1	Plastic 500ml - unpreserved				
94139-FO-LF-20250327-01	240-221258-D-1	Plastic 500ml - with Nitric Acid	<2			
94139-FO-LF-20250327-01	240-221258-E-1	Plastic 1 liter - Nitric Acid	<2			
94139-FO-LF-20250327-01	240-221258-F-1	Plastic 1 liter - Nitric Acid	<2			
9801-FO-LF-20250327-01	240-221258-A-2	Plastic 60 mL - unpreserved				
9801-FO-LF-20250327-01	240-221258-B-2	Plastic 60 mL - unpreserved				
9801-FO-LF-20250327-01	240-221258-C-2	Plastic 500ml - unpreserved				
9801-FO-LF-20250327-01	240-221258-D-2	Plastic 500ml - with Nitric Acid	<2			
9801-FO-LF-20250327-01	240-221258-E-2	Plastic 1 liter - Nitric Acid	<2			
9801-FO-LF-20250327-01	240-221258-F-2	Plastic 1 liter - Nitric Acid	<2			

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s): N/A	COC No: 240-200538.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: roxanne.cisneros@et.eurofinsus.com	State of Origin: Ohio	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): N/A		Job #: 240-221258-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 4/14/2025			Preservation Codes: -
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Federal GWM Wells	Project #: 24019633			Other: N/A
Site: N/A	SSOW#: N/A			

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9320_Ra228/PrecSep_0 Radium-228 (GFPC)	9315_Ra226/PrecSep_21 Radium-226 (GFPC)	Ra226Ra228_GFPC/ Combined Radium-226 and Radium-228	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
94139-FO-LF-20250327-01 (240-221258-1)	3/27/25	10:35 Eastern	G	Water			X	X	X	2	
9801-FO-LF-20250327-01 (240-221258-2)	3/27/25	12:10 Eastern	G	Water			X	X	X	2	

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

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

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
MALISSA LOAR	3/31/25 8am		M. Pinette	APR 01 2025 0840	
Relinquished by:	Date/Time:	Company	Received by: Meadow Pinette	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: 10/10/2024

4/28/2025

Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-221258-1

Login Number: 221258
List Number: 2
Creator: Pinette, Meadow L

List Source: Eurofins St. Louis
List Creation: 04/01/25 10:49 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?	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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620

Generated 4/28/2025 3:24:22 PM

JOB DESCRIPTION

Federal CCR Wells

JOB NUMBER

240-221385-1

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

myEOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization

Roxanne Cisneros

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4/28/2025 3:24:22 PM

Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(330)497-9396

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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-221385-1

Qualifiers

Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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
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: 240-221385-1 — Eurofins Cleveland

Job Narrative
240-221385-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The sample was received on 4/1/2025 3:00 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 3.4°C, 4.4°C and 18.9°C.

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

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

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

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

Method Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-221385-1
Project/Site: Federal CCR Wells

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CLE
6020B	Metals (ICP/MS)	SW846	EET CLE
7470A	Mercury (CVAA)	SW846	EET CLE
2320 B-2021	Alkalinity	SM	EET CLE
2540 C-2020	Solids, Total Dissolved (TDS)	SM	EET CLE
300.0	Anions, Ion Chromatography	EPA	EET CLE
9315	Radium 226 by GFPC	SW846	EET SL
9320	Radium-228 (GFPC)	SW846	EET SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	EET SL
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CLE
7470A	Preparation, Mercury	SW846	EET CLE
PrecSep_0	Preparation, Precipitate Separation	None	EET SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	EET SL

Protocol References:

EPA = US Environmental Protection Agency

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:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

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

Sample Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-221385-1
Project/Site: Federal CCR Wells

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-221385-1	2022-02-F-20250328-01	Water	03/28/25 11:30	04/01/25 15:00

Detection Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-221385-1

Client Sample ID: 2022-02-F-20250328-01

Lab Sample ID: 240-221385-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	450		100	57	ug/L	1		6010D	Total Recoverable
Antimony	1.8	J	2.0	0.57	ug/L	1		6020B	Total Recoverable
Arsenic	2.8	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	600		5.0	0.77	ug/L	1		6020B	Total Recoverable
Calcium	31000		1000	250	ug/L	1		6020B	Total Recoverable
Chromium	2100		5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	44		1.0	0.086	ug/L	1		6020B	Total Recoverable
Lead	1.3		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	46	B	40	17	ug/L	5		6020B	Total Recoverable
Magnesium	8200		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	400		5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	4800		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	1600000		5000	4400	ug/L	5		6020B	Total Recoverable
Total Alkalinity	310		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	310		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	3900		50	39	mg/L	1		2540 C-2020	Total/NA
Chloride	2200		20	2.6	mg/L	20		300.0	Total/NA
Fluoride	1.8		0.25	0.12	mg/L	5		300.0	Total/NA
Sulfate	88		5.0	1.7	mg/L	5		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 2022-02-F-20250328-01
Date Collected: 03/28/25 11:30
Date Received: 04/01/25 15:00

Lab Sample ID: 240-221385-1
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	450		100	57	ug/L		04/02/25 14:00	04/04/25 19:30	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.8	J	2.0	0.57	ug/L		04/02/25 14:00	04/04/25 15:09	1
Arsenic	2.8	J	5.0	0.75	ug/L		04/02/25 14:00	04/04/25 15:09	1
Barium	600		5.0	0.77	ug/L		04/02/25 14:00	04/04/25 15:09	1
Beryllium	ND		5.0	1.4	ug/L		04/02/25 14:00	04/07/25 18:26	5
Cadmium	ND		1.0	0.077	ug/L		04/02/25 14:00	04/04/25 15:09	1
Calcium	31000		1000	250	ug/L		04/02/25 14:00	04/04/25 15:09	1
Chromium	2100		5.0	1.2	ug/L		04/02/25 14:00	04/04/25 15:09	1
Cobalt	44		1.0	0.086	ug/L		04/02/25 14:00	04/04/25 15:09	1
Lead	1.3		1.0	0.45	ug/L		04/02/25 14:00	04/04/25 15:09	1
Lithium	46	B	40	17	ug/L		04/02/25 14:00	04/08/25 15:45	5
Magnesium	8200		1000	61	ug/L		04/02/25 14:00	04/04/25 15:09	1
Molybdenum	400		5.0	1.1	ug/L		04/02/25 14:00	04/04/25 15:09	1
Potassium	4800		1000	220	ug/L		04/02/25 14:00	04/04/25 15:09	1
Selenium	ND		5.0	0.89	ug/L		04/02/25 14:00	04/04/25 15:09	1
Sodium	1600000		5000	4400	ug/L		04/02/25 14:00	04/08/25 15:45	5
Thallium	ND		1.0	0.51	ug/L		04/02/25 14:00	04/04/25 15:09	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		04/02/25 14:00	04/03/25 12:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	310		5.0	2.6	mg/L			04/02/25 13:31	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	310		5.0	2.6	mg/L			04/02/25 13:31	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			04/02/25 13:31	1
Total Dissolved Solids (SM 2540 C-2020)	3900		50	39	mg/L			04/02/25 14:50	1
Chloride (EPA 300.0)	2200		20	2.6	mg/L			04/03/25 00:10	20
Fluoride (EPA 300.0)	1.8		0.25	0.12	mg/L			04/03/25 00:01	5
Sulfate (EPA 300.0)	88		5.0	1.7	mg/L			04/03/25 00:01	5

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.36		0.527	0.541	1.00	0.596	pCi/L	04/03/25 07:32	04/28/25 10:14	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.4*		*30 - 110*	*04/03/25 07:32*	*04/28/25 10:14*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.97		0.751	0.772	1.00	0.897	pCi/L	04/03/25 07:37	04/27/25 11:37	1

Client Sample ID: 2022-02-F-20250328-01
Lab Sample ID: 240-221385-1
Date Collected: 03/28/25 11:30
Matrix: Water
Date Received: 04/01/25 15:00

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.4*		*30 - 110*	*04/03/25 07:37*	*04/27/25 11:37*	*1*
Y Carrier	*79.3*		*30 - 110*	*04/03/25 07:37*	*04/27/25 11:37*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**3.33**		0.917	0.943	5.00	0.897	pCi/L		04/28/25 13:12	1

Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-221385-1

Method: 9315 - Radium 226 by GFPC

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)
		Ba
Lab Sample ID	Client Sample ID	(30-110)
240-221385-1	2022-02-F-20250328-01	94.4
LCS 160-710550/2-A	Lab Control Sample	90.5
MB 160-710550/1-A	Method Blank	93.6

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	(30-110)	(30-110)
240-221385-1	2022-02-F-20250328-01	94.4	79.3
LCS 160-710551/2-A	Lab Control Sample	90.5	86.7
MB 160-710551/1-A	Method Blank	93.6	74.8

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-650548/1-A
Matrix: Water
Analysis Batch: 651012

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 650548

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		04/02/25 14:00	04/04/25 17:17	1

Lab Sample ID: LCS 240-650548/2-A
Matrix: Water
Analysis Batch: 651012

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 650548

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1000	1060		ug/L		106	80 - 120

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-650548/1-A
Matrix: Water
Analysis Batch: 651071

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 650548

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		04/02/25 14:00	04/04/25 13:32	1
Arsenic	ND		5.0	0.75	ug/L		04/02/25 14:00	04/04/25 13:32	1
Barium	ND		5.0	0.77	ug/L		04/02/25 14:00	04/04/25 13:32	1
Beryllium	ND	^+	1.0	0.27	ug/L		04/02/25 14:00	04/04/25 13:32	1
Cadmium	ND		1.0	0.077	ug/L		04/02/25 14:00	04/04/25 13:32	1
Calcium	ND		1000	250	ug/L		04/02/25 14:00	04/04/25 13:32	1
Chromium	ND		5.0	1.2	ug/L		04/02/25 14:00	04/04/25 13:32	1
Cobalt	ND		1.0	0.086	ug/L		04/02/25 14:00	04/04/25 13:32	1
Lead	ND		1.0	0.45	ug/L		04/02/25 14:00	04/04/25 13:32	1
Lithium	4.19	J ^+	8.0	3.4	ug/L		04/02/25 14:00	04/04/25 13:32	1
Magnesium	ND		1000	61	ug/L		04/02/25 14:00	04/04/25 13:32	1
Molybdenum	ND		5.0	1.1	ug/L		04/02/25 14:00	04/04/25 13:32	1
Potassium	ND		1000	220	ug/L		04/02/25 14:00	04/04/25 13:32	1
Selenium	ND		5.0	0.89	ug/L		04/02/25 14:00	04/04/25 13:32	1
Sodium	ND		1000	880	ug/L		04/02/25 14:00	04/04/25 13:32	1
Thallium	ND		1.0	0.51	ug/L		04/02/25 14:00	04/04/25 13:32	1

Lab Sample ID: LCS 240-650548/3-A
Matrix: Water
Analysis Batch: 651071

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 650548

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	102		ug/L		102	80 - 120
Arsenic	1000	1060		ug/L		106	80 - 120
Barium	1000	984		ug/L		98	80 - 120
Beryllium	500	553	^+	ug/L		111	80 - 120
Cadmium	500	484		ug/L		97	80 - 120
Calcium	25000	26500		ug/L		106	80 - 120
Chromium	500	497		ug/L		99	80 - 120
Cobalt	500	510		ug/L		102	80 - 120
Lead	500	487		ug/L		97	80 - 120
Lithium	500	557	^+	ug/L		111	80 - 120
Magnesium	25000	25900		ug/L		104	80 - 120

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

Lab Sample ID: LCS 240-650548/3-A
Matrix: Water
Analysis Batch: 651071

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 650548

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Molybdenum	500	511		ug/L		102	80 - 120
Potassium	25000	27400		ug/L		110	80 - 120
Selenium	1000	995		ug/L		99	80 - 120
Sodium	25000	25900		ug/L		104	80 - 120
Thallium	1000	1140		ug/L		114	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-650551/1-A
Matrix: Water
Analysis Batch: 650789

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 650551

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		04/02/25 14:00	04/03/25 11:19	1

Lab Sample ID: LCS 240-650551/2-A
Matrix: Water
Analysis Batch: 650789

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 650551

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.05		ug/L		101	80 - 120

Method: 2320 B-2021 - Alkalinity

Lab Sample ID: MB 240-650639/30
Matrix: Water
Analysis Batch: 650639

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	ND		5.0	2.6	mg/L			04/02/25 12:27	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/02/25 12:27	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/02/25 12:27	1

Lab Sample ID: MB 240-650639/4
Matrix: Water
Analysis Batch: 650639

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	3.83	J	5.0	2.6	mg/L			04/02/25 10:07	1
Bicarbonate Alkalinity as CaCO3	3.83	J	5.0	2.6	mg/L			04/02/25 10:07	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/02/25 10:07	1

Lab Sample ID: LCS 240-650639/29
Matrix: Water
Analysis Batch: 650639

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	280	268		mg/L		96	86 - 123

Method: 2540 C-2020 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 240-650624/1
Matrix: Water
Analysis Batch: 650624

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	ND		10	7.8	mg/L			04/02/25 14:50	1

Lab Sample ID: LCS 240-650624/2
Matrix: Water
Analysis Batch: 650624

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	176	166		mg/L		94	80 - 120

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-650626/4
Matrix: Water
Analysis Batch: 650626

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.13	mg/L			04/02/25 16:14	1
Fluoride	ND		0.050	0.024	mg/L			04/02/25 16:14	1
Sulfate	ND		1.0	0.35	mg/L			04/02/25 16:14	1

Lab Sample ID: LCS 240-650626/5
Matrix: Water
Analysis Batch: 650626

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	47.3		mg/L		95	90 - 110
Fluoride	2.50	2.44		mg/L		98	90 - 110
Sulfate	50.0	46.6		mg/L		93	90 - 110

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-710550/1-A
Matrix: Water
Analysis Batch: 714984

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 710550

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.04870	U	0.135	0.135	1.00	0.251	pCi/L	04/03/25 07:32	04/28/25 10:07	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.6*		*30 - 110*	*04/03/25 07:32*	*04/28/25 10:07*	*1*

Lab Sample ID: LCS 160-710550/2-A
Matrix: Water
Analysis Batch: 714984

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 710550

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226	9.58	9.323		1.16	1.00	0.235	pCi/L	97	75 - 125

Method: 9315 - Radium 226 by GFPC (Continued)

Lab Sample ID: LCS 160-710550/2-A
Matrix: Water
Analysis Batch: 714984

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 710550

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*90.5*		*30 - 110*

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-710551/1-A
Matrix: Water
Analysis Batch: 714821

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 710551

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.2624	U	0.338	0.339	1.00	0.563	pCi/L	04/03/25 07:37	04/27/25 11:18	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.6*		*30 - 110*	*04/03/25 07:37*	*04/27/25 11:18*	*1*
Y Carrier	*74.8*		*30 - 110*	*04/03/25 07:37*	*04/27/25 11:18*	*1*

Lab Sample ID: LCS 160-710551/2-A
Matrix: Water
Analysis Batch: 714821

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 710551

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228			9.50	9.751		1.29	1.00	0.487	pCi/L	103	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*90.5*		*30 - 110*
Y Carrier	*86.7*		*30 - 110*

Metals

Prep Batch: 650548

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-221385-1	2022-02-F-20250328-01	Total Recoverable	Water	3005A	
MB 240-650548/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-650548/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-650548/3-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 650551

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-221385-1	2022-02-F-20250328-01	Total/NA	Water	7470A	
MB 240-650551/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-650551/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 650789

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-221385-1	2022-02-F-20250328-01	Total/NA	Water	7470A	650551
MB 240-650551/1-A	Method Blank	Total/NA	Water	7470A	650551
LCS 240-650551/2-A	Lab Control Sample	Total/NA	Water	7470A	650551

Analysis Batch: 651012

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-221385-1	2022-02-F-20250328-01	Total Recoverable	Water	6010D	650548
MB 240-650548/1-A	Method Blank	Total Recoverable	Water	6010D	650548
LCS 240-650548/2-A	Lab Control Sample	Total Recoverable	Water	6010D	650548

Analysis Batch: 651071

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-221385-1	2022-02-F-20250328-01	Total Recoverable	Water	6020B	650548
MB 240-650548/1-A	Method Blank	Total Recoverable	Water	6020B	650548
LCS 240-650548/3-A	Lab Control Sample	Total Recoverable	Water	6020B	650548

Analysis Batch: 651247

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-221385-1	2022-02-F-20250328-01	Total Recoverable	Water	6020B	650548

Analysis Batch: 651337

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-221385-1	2022-02-F-20250328-01	Total Recoverable	Water	6020B	650548

General Chemistry

Analysis Batch: 650624

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-221385-1	2022-02-F-20250328-01	Total/NA	Water	2540 C-2020	
MB 240-650624/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-650624/2	Lab Control Sample	Total/NA	Water	2540 C-2020	

Analysis Batch: 650626

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-221385-1	2022-02-F-20250328-01	Total/NA	Water	300.0	
240-221385-1	2022-02-F-20250328-01	Total/NA	Water	300.0	
MB 240-650626/4	Method Blank	Total/NA	Water	300.0	
LCS 240-650626/5	Lab Control Sample	Total/NA	Water	300.0	

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-221385-1

General Chemistry

Analysis Batch: 650639

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-221385-1	2022-02-F-20250328-01	Total/NA	Water	2320 B-2021	
MB 240-650639/30	Method Blank	Total/NA	Water	2320 B-2021	
MB 240-650639/4	Method Blank	Total/NA	Water	2320 B-2021	
LCS 240-650639/29	Lab Control Sample	Total/NA	Water	2320 B-2021	

Rad

Prep Batch: 710550

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-221385-1	2022-02-F-20250328-01	Total/NA	Water	PrecSep-21	
MB 160-710550/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-710550/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 710551

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-221385-1	2022-02-F-20250328-01	Total/NA	Water	PrecSep_0	
MB 160-710551/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-710551/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-221385-1
Project/Site: Federal CCR Wells

Client Sample ID: 2022-02-F-20250328-01
Lab Sample ID: 240-221385-1

Date Collected: 03/28/25 11:30
Matrix: Water
Date Received: 04/01/25 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			650548	XWS6	EET CLE	04/02/25 14:00
Total Recoverable	Analysis	6010D		1	651012	AJC	EET CLE	04/04/25 19:30
Total Recoverable	Prep	3005A			650548	XWS6	EET CLE	04/02/25 14:00
Total Recoverable	Analysis	6020B		1	651071	S4FJ	EET CLE	04/04/25 15:09
Total Recoverable	Prep	3005A			650548	XWS6	EET CLE	04/02/25 14:00
Total Recoverable	Analysis	6020B		5	651247	S4FJ	EET CLE	04/07/25 18:26
Total Recoverable	Prep	3005A			650548	XWS6	EET CLE	04/02/25 14:00
Total Recoverable	Analysis	6020B		5	651337	S4FJ	EET CLE	04/08/25 15:45
Total/NA	Prep	7470A			650551	XWS6	EET CLE	04/02/25 14:00
Total/NA	Analysis	7470A		1	650789	TQ6W	EET CLE	04/03/25 12:09
Total/NA	Analysis	2320 B-2021		1	650639	JMR	EET CLE	04/02/25 13:31
Total/NA	Analysis	2540 C-2020		1	650624	TAV2	EET CLE	04/02/25 14:50
Total/NA	Analysis	300.0		5	650626	JWW	EET CLE	04/03/25 00:01
Total/NA	Analysis	300.0		20	650626	JWW	EET CLE	04/03/25 00:10
Total/NA	Prep	PrecSep-21			710550	OGC	EET SL	04/03/25 07:32
Total/NA	Analysis	9315		1	714833	SWS	EET SL	04/28/25 10:14
Total/NA	Prep	PrecSep_0			710551	OGC	EET SL	04/03/25 07:37
Total/NA	Analysis	9320		1	714822	FLC	EET SL	04/27/25 11:37
Total/NA	Analysis	Ra226_Ra228		1	715010	FLC	EET SL	04/28/25 13:12

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

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

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-221385-1
Project/Site: Federal CCR Wells

Laboratory: Eurofins Cleveland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0806	12-31-26
Georgia	State	4062	02-27-26
Illinois	NELAP	200004	08-31-25
Iowa	State	421	06-01-25
Kansas	NELAP	E-10336	01-31-26
Kentucky (UST)	State	112225	02-28-26
Kentucky (WW)	State	KY98016	12-31-25
Minnesota	NELAP	039-999-348	12-31-25
New Hampshire	NELAP	225024	09-30-25
New Jersey	NELAP	OH001	07-03-25
New York	NELAP	10975	04-01-26
North Dakota	State	R-244	02-27-26
Ohio	State	8303	11-04-25
Ohio VAP	State	ORELAP 4062	02-28-26
Oregon	NELAP	4062	02-27-26
Pennsylvania	NELAP	68-00340	08-31-25
Texas	NELAP	T104704517-22-19	08-31-25
US Fish & Wildlife	US Federal Programs	A26406	02-28-26
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	09-14-25
West Virginia DEP	State	210	12-31-25
Wisconsin	State	399167560	08-31-25

Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-25
ANAB	Dept. of Defense ELAP	L2305	04-06-27
ANAB	Dept. of Energy	L2305.01	04-06-27
ANAB	ISO/IEC 17025	L2305	04-06-27
Arizona	State	AZ0813	12-08-25
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-25
Connecticut	State	PH-0241	03-31-25 *
Florida	NELAP	E87689	06-30-25
HI - RadChem Recognition	State	n/a	06-30-25
Illinois	NELAP	200023	11-30-25
Iowa	State	373	12-01-26
Kansas	NELAP	E-10236	10-31-25
Kentucky (DW)	State	KY90125	12-31-25
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-25
Louisiana (All)	NELAP	106151	06-30-25
Louisiana (DW)	State	LA011	12-31-25
Maryland	State	310	09-30-25
Massachusetts	State	M-MO054	06-30-25
MI - RadChem Recognition	State	9005	06-30-25
Missouri	State	780	06-30-25
Nevada	State	MO00054	07-31-25

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-221385-1
Project/Site: Federal CCR Wells

Laboratory: Eurofins St. Louis (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New Jersey	NELAP	MO002	06-30-25
New Mexico	State	MO00054	06-30-25
New York	NELAP	11616	03-31-26
North Carolina (DW)	State	29700	07-31-25
North Dakota	State	R-207	06-30-25
Oklahoma	NELAP	9997	08-31-25
Oregon	NELAP	4157	09-01-25
Pennsylvania	NELAP	68-00540	02-28-26
South Carolina	State	85002	06-30-25
Texas	NELAP	T104704193	07-31-25
US Fish & Wildlife	US Federal Programs	058448	07-31-25
USDA	US Federal Programs	525-23-138-94730	05-18-26
Utah	NELAP	MO00054	07-31-25
Virginia	NELAP	460230	06-14-25
Washington	State	C592	08-30-25
West Virginia DEP	State	381	10-31-25

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins
Environment Testing

Client Information	Sampler: Bobby Castle	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s):	COC No.: 240-111832-39818.1
Client Contact: Taylor Huffman	Phone: 740-375-4308	E-Mail: roxanne.cisneros@et.eurofinsus.com	State of Origin:	Page: Page 1 of 8
Company: Lightstone Generation Gavin Power LLC	PWSID:			Job #:
Address: 7397 OH-7	Due Date Requested:			
City: Cheshire	TAT Requested (days):			
State, Zip: OH, 45620	Compliance Project: Δ Yes Δ No			
Phone: 740-925-3171(Tel)	PO #: 2935505			
Email: taylor.huffman@lightstonegen.com	WO #:			
Project Name: Gavin CCR	Project #: 24019633			
Site: Gavin	SSOW#:			

Analysis Requested

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wastestl, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B, 6020, 7470A	2540C_Calcd - TDS	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	300.0_28D - Chloride, Fluoride & Sulfate	2320B - (MOD) Alkalinity	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	D	N	D	N	N	X	
2022-02-F-20250328-01	3-28-25	1130	G	Water			1	1	2	1	1		
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									

240-221385 COC

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	[signature]	4-1-25/0930	KEMRON	[signature]	4/1/25	Waypoint
2	Relinquished by:	Date/Time:	Company	Received by: KATHARINE MARTIN	Date/Time: 4/1/25 1500	Company EUL
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 06/08/2021

Eurofins – Cleveland Sample Receipt Form/Narrative **Login # :** _____
Barberton Facility

Client Gavin Site Name _____ Cooler unpacked by: VMartin

Cooler Received on 4/1/25 Opened on 4/1/25

FedEx: 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other _____

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

Eurofins Cooler # EC 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 # 13 (CF +0.0 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity _____	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# HC448976
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 # : _____

Eurofins - Cleveland Sample Receipt Multiple Cooler Form				
Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
(EC) Client Box Other	IR GUN #: 13	4.4	4.1	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #: 1	3.4	3.4	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #: 1	18.9	18.9	Wet Ice Blue Ice Dry Ice Water (None)
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s): N/A	COC No: 240-200654.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: roxanne.cisneros@et.eurofinsus.com	State of Origin: Ohio	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): N/A		Job #: 240-221385-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 4/14/2025			
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Federal GWM Wells	Project #: 24019633			
Site: N/A	SSOW#: N/A			

Analysis Requested

Preservation Codes:

Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9320_Ra228/PrecSep_0 Radium-228 (GFPC)	9315_Ra226/PrecSep_21 Radium-226 (GFPC)	Ra226Ra228_GFPC/ Combined Radium-226 and Radium-228	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
2022-02-F-20250328-01 (240-221385-1)	3/28/25	11:30 Eastern	G	Water			X	X	X	2	

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

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

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

Relinquished by: JCollins	Date/Time: 4-1-25	Company: ECW	Received by: [signature]	Date/Time: 0830 APR 02 2025	Company: ETA STL
Relinquished by:	Date/Time:	Company	Received by: Cheyenne Forrest	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: 10/10/2024

Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-221385-1

Login Number: 221385
List Number: 2
Creator: Forrest, Cheyenne L

List Source: Eurofins St. Louis
List Creation: 04/02/25 11:01 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?	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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620

Generated 5/7/2025 5:58:41 PM

JOB DESCRIPTION

Federal CCR Wells

JOB NUMBER

240-221677-1

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization

Roxanne Cisneros

Generated
5/7/2025 5:58:41 PM

Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(330)497-9396

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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
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

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

Job ID: 240-221677-1 — Eurofins Cleveland

Job Narrative
240-221677-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The sample was received on 4/4/2025 3:45 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.0°C.

Metals
Method 6020B - Total Recoverable: The following sample was diluted due to the nature of the sample matrix: 2016-10-F-20250401-01 (240-221677-1). Elevated reporting limits (RLs) are provided.

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

General Chemistry
Method 300.0_28D: The following sample was diluted due to the nature of the sample matrix: 2016-10-F-20250401-01 (240-221677-1). Elevated reporting limits (RLs) are provided.

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

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

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

Method Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-221677-1
Project/Site: Federal CCR Wells

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CLE
6020B	Metals (ICP/MS)	SW846	EET CLE
7470A	Mercury (CVAA)	SW846	EET CLE
2320 B-2021	Alkalinity	SM	EET CLE
2540 C-2020	Solids, Total Dissolved (TDS)	SM	EET CLE
300.0	Anions, Ion Chromatography	EPA	EET CLE
9315	Radium 226 by GFPC	SW846	EET SL
9320	Radium-228 (GFPC)	SW846	EET SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	EET SL
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CLE
7470A	Preparation, Mercury	SW846	EET CLE
PrecSep_0	Preparation, Precipitate Separation	None	EET SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	EET SL

Protocol References:

EPA = US Environmental Protection Agency

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:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

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

Sample Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-221677-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-221677-1	2016-10-F-20250401-01	Water	04/01/25 11:20	04/04/25 15:45

Detection Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-221677-1

Client Sample ID: 2016-10-F-20250401-01

Lab Sample ID: 240-221677-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	430		100	57	ug/L	1		6010D	Total Recoverable
Barium	1400		25	3.9	ug/L	5		6020B	Total Recoverable
Calcium	880000		10000	2500	ug/L	10		6020B	Total Recoverable
Lithium	340		40	17	ug/L	5		6020B	Total Recoverable
Magnesium	300000		5000	310	ug/L	5		6020B	Total Recoverable
Molybdenum	12	J	25	5.4	ug/L	5		6020B	Total Recoverable
Potassium	66000		5000	1100	ug/L	5		6020B	Total Recoverable
Sodium	9200000		10000	8800	ug/L	10		6020B	Total Recoverable
Total Alkalinity	19	B	5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	19	B	5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	26000		1000	780	mg/L	1		2540 C-2020	Total/NA
Chloride	20000		100	13	mg/L	100		300.0	Total/NA
Sulfate	81	J	100	35	mg/L	100		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-221677-1

Client Sample ID: 2016-10-F-20250401-01

Date Collected: 04/01/25 11:20
Date Received: 04/04/25 15:45

Lab Sample ID: 240-221677-1

Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**430**		100	57	ug/L		04/07/25 14:00	04/09/25 00:16	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		10	2.9	ug/L		04/07/25 14:00	04/09/25 11:42	5
Arsenic	ND		25	3.8	ug/L		04/07/25 14:00	04/09/25 11:42	5
Barium	**1400**		25	3.9	ug/L		04/07/25 14:00	04/09/25 11:42	5
Beryllium	ND		5.0	1.4	ug/L		04/07/25 14:00	04/09/25 11:42	5
Cadmium	ND		5.0	0.39	ug/L		04/07/25 14:00	04/09/25 11:42	5
Calcium	**880000**		10000	2500	ug/L		04/07/25 14:00	04/10/25 13:11	10
Chromium	ND		25	6.0	ug/L		04/07/25 14:00	04/09/25 11:42	5
Cobalt	ND		5.0	0.43	ug/L		04/07/25 14:00	04/09/25 11:42	5
Lead	ND		5.0	2.3	ug/L		04/07/25 14:00	04/09/25 11:42	5
Lithium	**340**		40	17	ug/L		04/07/25 14:00	04/09/25 11:42	5
Magnesium	**300000**		5000	310	ug/L		04/07/25 14:00	04/09/25 11:42	5
Molybdenum	**12**	**J**	25	5.4	ug/L		04/07/25 14:00	04/09/25 11:42	5
Potassium	**66000**		5000	1100	ug/L		04/07/25 14:00	04/09/25 11:42	5
Selenium	ND		25	4.5	ug/L		04/07/25 14:00	04/09/25 11:42	5
Sodium	**9200000**		10000	8800	ug/L		04/07/25 14:00	04/10/25 13:11	10
Thallium	ND		5.0	2.5	ug/L		04/07/25 14:00	04/09/25 11:42	5

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		04/07/25 14:00	04/08/25 11:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	**19**	**B**	5.0	2.6	mg/L			04/10/25 18:21	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**19**	**B**	5.0	2.6	mg/L			04/10/25 18:21	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			04/10/25 18:21	1
Total Dissolved Solids (SM 2540 C-2020)	**26000**		1000	780	mg/L			04/07/25 09:29	1
Chloride (EPA 300.0)	**20000**		100	13	mg/L			04/07/25 19:48	100
Fluoride (EPA 300.0)	ND		5.0	2.4	mg/L			04/07/25 19:48	100
Sulfate (EPA 300.0)	**81**	**J**	100	35	mg/L			04/07/25 19:48	100

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**4.71**		0.646	0.773	1.00	0.320	pCi/L	04/09/25 07:24	05/07/25 14:21	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*101*		*30 - 110*	*04/09/25 07:24*	*05/07/25 14:21*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**20.7**		1.29	2.30	1.00	0.466	pCi/L	04/09/25 07:28	05/07/25 09:57	1

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-221677-1

Client Sample ID: 2016-10-F-20250401-01
Date Collected: 04/01/25 11:20
Date Received: 04/04/25 15:45

Lab Sample ID: 240-221677-1
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*101*		*30 - 110*	*04/09/25 07:28*	*05/07/25 09:57*	*1*
Y Carrier	*84.5*		*30 - 110*	*04/09/25 07:28*	*05/07/25 09:57*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**25.4**		1.44	2.43	5.00	0.466	pCi/L		05/06/25 19:33	1

Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-221677-1

Method: 9315 - Radium 226 by GFPC

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)
		Ba
Lab Sample ID	Client Sample ID	(30-110)
240-221677-1	2016-10-F-20250401-01	101
LCS 160-711578/2-A	Lab Control Sample	88.6
MB 160-711578/1-A	Method Blank	93.7

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	(30-110)	(30-110)
240-221677-1	2016-10-F-20250401-01	101	84.5
LCS 160-711579/2-A	Lab Control Sample	88.6	79.6
MB 160-711579/1-A	Method Blank	93.7	81.5

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-651163/1-A
Matrix: Water
Analysis Batch: 651433

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 651163

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		04/07/25 14:00	04/08/25 23:18	1

Lab Sample ID: LCS 240-651163/2-A
Matrix: Water
Analysis Batch: 651433

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 651163

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1000	1050		ug/L		105	80 - 120

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-651163/1-A
Matrix: Water
Analysis Batch: 651537

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 651163

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		04/07/25 14:00	04/09/25 10:51	1
Arsenic	ND		5.0	0.75	ug/L		04/07/25 14:00	04/09/25 10:51	1
Barium	ND		5.0	0.77	ug/L		04/07/25 14:00	04/09/25 10:51	1
Beryllium	ND		1.0	0.27	ug/L		04/07/25 14:00	04/09/25 10:51	1
Cadmium	ND		1.0	0.077	ug/L		04/07/25 14:00	04/09/25 10:51	1
Calcium	ND		1000	250	ug/L		04/07/25 14:00	04/09/25 10:51	1
Chromium	ND		5.0	1.2	ug/L		04/07/25 14:00	04/09/25 10:51	1
Cobalt	ND		1.0	0.086	ug/L		04/07/25 14:00	04/09/25 10:51	1
Lead	ND		1.0	0.45	ug/L		04/07/25 14:00	04/09/25 10:51	1
Lithium	ND		8.0	3.4	ug/L		04/07/25 14:00	04/09/25 10:51	1
Magnesium	ND		1000	61	ug/L		04/07/25 14:00	04/09/25 10:51	1
Molybdenum	ND		5.0	1.1	ug/L		04/07/25 14:00	04/09/25 10:51	1
Potassium	ND		1000	220	ug/L		04/07/25 14:00	04/09/25 10:51	1
Selenium	ND		5.0	0.89	ug/L		04/07/25 14:00	04/09/25 10:51	1
Sodium	ND		1000	880	ug/L		04/07/25 14:00	04/09/25 10:51	1
Thallium	ND		1.0	0.51	ug/L		04/07/25 14:00	04/09/25 10:51	1

Lab Sample ID: LCS 240-651163/3-A
Matrix: Water
Analysis Batch: 651537

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 651163

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	91.3		ug/L		91	80 - 120
Arsenic	1000	929		ug/L		93	80 - 120
Barium	1000	881		ug/L		88	80 - 120
Beryllium	500	477		ug/L		95	80 - 120
Cadmium	500	438		ug/L		88	80 - 120
Calcium	25000	22800		ug/L		91	80 - 120
Chromium	500	460		ug/L		92	80 - 120
Cobalt	500	433		ug/L		87	80 - 120
Lead	500	479		ug/L		96	80 - 120
Lithium	500	444		ug/L		89	80 - 120
Magnesium	25000	22800		ug/L		91	80 - 120

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

Lab Sample ID: LCS 240-651163/3-A
Matrix: Water
Analysis Batch: 651537

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 651163

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Molybdenum	500	450		ug/L		90	80 - 120
Potassium	25000	23300		ug/L		93	80 - 120
Selenium	1000	901		ug/L		90	80 - 120
Sodium	25000	23200		ug/L		93	80 - 120
Thallium	1000	1000		ug/L		100	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-651164/1-A
Matrix: Water
Analysis Batch: 651334

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 651164

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		04/07/25 14:00	04/08/25 11:12	1

Lab Sample ID: LCS 240-651164/2-A
Matrix: Water
Analysis Batch: 651334

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 651164

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.03		ug/L		101	80 - 120

Method: 2320 B-2021 - Alkalinity

Lab Sample ID: MB 240-651805/4
Matrix: Water
Analysis Batch: 651805

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	3.52	J	5.0	2.6	mg/L			04/10/25 16:08	1
Bicarbonate Alkalinity as CaCO3	3.52	J	5.0	2.6	mg/L			04/10/25 16:08	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/10/25 16:08	1

Lab Sample ID: LCS 240-651805/3
Matrix: Water
Analysis Batch: 651805

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	280	256		mg/L		91	86 - 123

Method: 2540 C-2020 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 240-651102/1
Matrix: Water
Analysis Batch: 651102

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	ND		10	7.8	mg/L			04/07/25 09:29	1

Method: 2540 C-2020 - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCS 240-651102/2
Matrix: Water
Analysis Batch: 651102

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	176	164		mg/L		93	80 - 120

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-651187/3
Matrix: Water
Analysis Batch: 651187

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.13	mg/L			04/07/25 15:22	1
Fluoride	ND		0.050	0.024	mg/L			04/07/25 15:22	1
Sulfate	ND		1.0	0.35	mg/L			04/07/25 15:22	1

Lab Sample ID: LCS 240-651187/4
Matrix: Water
Analysis Batch: 651187

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	47.6		mg/L		95	90 - 110
Fluoride	2.50	2.45		mg/L		98	90 - 110
Sulfate	50.0	47.1		mg/L		94	90 - 110

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-711578/1-A
Matrix: Water
Analysis Batch: 716364

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 711578

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.04702	U	0.161	0.161	1.00	0.310	pCi/L	04/09/25 07:24	05/07/25 14:20	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.7*		*30 - 110*	*04/09/25 07:24*	*05/07/25 14:20*	*1*

Lab Sample ID: LCS 160-711578/2-A
Matrix: Water
Analysis Batch: 716364

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 711578

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226	9.58	8.203		1.16	1.00	0.353	pCi/L	86	75 - 125

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*88.6*		*30 - 110*

QC Sample Results

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-221677-1

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-711579/1-A
Matrix: Water
Analysis Batch: 716362

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 711579

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.01290	U	0.270	0.270	1.00	0.506	pCi/L	04/09/25 07:28	05/07/25 09:44	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.7*		*30 - 110*	*04/09/25 07:28*	*05/07/25 09:44*	*1*
Y Carrier	*81.5*		*30 - 110*	*04/09/25 07:28*	*05/07/25 09:44*	*1*

Lab Sample ID: LCS 160-711579/2-A
Matrix: Water
Analysis Batch: 716362

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 711579

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228			9.47	11.15		1.49	1.00	0.664	pCi/L	118	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*88.6*		*30 - 110*
Y Carrier	*79.6*		*30 - 110*

Metals

Prep Batch: 651163

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-221677-1	2016-10-F-20250401-01	Total Recoverable	Water	3005A	
MB 240-651163/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-651163/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-651163/3-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 651164

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-221677-1	2016-10-F-20250401-01	Total/NA	Water	7470A	
MB 240-651164/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-651164/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 651334

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-221677-1	2016-10-F-20250401-01	Total/NA	Water	7470A	651164
MB 240-651164/1-A	Method Blank	Total/NA	Water	7470A	651164
LCS 240-651164/2-A	Lab Control Sample	Total/NA	Water	7470A	651164

Analysis Batch: 651433

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-221677-1	2016-10-F-20250401-01	Total Recoverable	Water	6010D	651163
MB 240-651163/1-A	Method Blank	Total Recoverable	Water	6010D	651163
LCS 240-651163/2-A	Lab Control Sample	Total Recoverable	Water	6010D	651163

Analysis Batch: 651537

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-221677-1	2016-10-F-20250401-01	Total Recoverable	Water	6020B	651163
MB 240-651163/1-A	Method Blank	Total Recoverable	Water	6020B	651163
LCS 240-651163/3-A	Lab Control Sample	Total Recoverable	Water	6020B	651163

Analysis Batch: 651731

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-221677-1	2016-10-F-20250401-01	Total Recoverable	Water	6020B	651163

General Chemistry

Analysis Batch: 651102

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-221677-1	2016-10-F-20250401-01	Total/NA	Water	2540 C-2020	
MB 240-651102/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-651102/2	Lab Control Sample	Total/NA	Water	2540 C-2020	

Analysis Batch: 651187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-221677-1	2016-10-F-20250401-01	Total/NA	Water	300.0	
MB 240-651187/3	Method Blank	Total/NA	Water	300.0	
LCS 240-651187/4	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 651805

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-221677-1	2016-10-F-20250401-01	Total/NA	Water	2320 B-2021	
MB 240-651805/4	Method Blank	Total/NA	Water	2320 B-2021	

General Chemistry (Continued)

Analysis Batch: 651805 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 240-651805/3	Lab Control Sample	Total/NA	Water	2320 B-2021	

Rad

Prep Batch: 711578

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-221677-1	2016-10-F-20250401-01	Total/NA	Water	PrecSep-21	
MB 160-711578/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-711578/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 711579

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-221677-1	2016-10-F-20250401-01	Total/NA	Water	PrecSep_0	
MB 160-711579/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-711579/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-221677-1
Project/Site: Federal CCR Wells

Client Sample ID: 2016-10-F-20250401-01
Lab Sample ID: 240-221677-1

Date Collected: 04/01/25 11:20
Matrix: Water
Date Received: 04/04/25 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			651163	XWS6	EET CLE	04/07/25 14:00
Total Recoverable	Analysis	6010D		1	651433	AJC	EET CLE	04/09/25 00:16
Total Recoverable	Prep	3005A			651163	XWS6	EET CLE	04/07/25 14:00
Total Recoverable	Analysis	6020B		10	651731	S4FJ	EET CLE	04/10/25 13:11
Total Recoverable	Prep	3005A			651163	XWS6	EET CLE	04/07/25 14:00
Total Recoverable	Analysis	6020B		5	651537	S4FJ	EET CLE	04/09/25 11:42
Total/NA	Prep	7470A			651164	XWS6	EET CLE	04/07/25 14:00
Total/NA	Analysis	7470A		1	651334	BN	EET CLE	04/08/25 11:30
Total/NA	Analysis	2320 B-2021		1	651805	PQD2	EET CLE	04/10/25 18:21
Total/NA	Analysis	2540 C-2020		1	651102	C5SV	EET CLE	04/07/25 09:29
Total/NA	Analysis	300.0		100	651187	JMR	EET CLE	04/07/25 19:48
Total/NA	Prep	PrecSep-21			711578	OGC	EET SL	04/09/25 07:24
Total/NA	Analysis	9315		1	716364	SWS	EET SL	05/07/25 14:21
Total/NA	Prep	PrecSep_0			711579	OGC	EET SL	04/09/25 07:28
Total/NA	Analysis	9320		1	716364	SWS	EET SL	05/07/25 09:57
Total/NA	Analysis	Ra226_Ra228		1	716234	EMH	EET SL	05/06/25 19:33

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

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

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-221677-1
Project/Site: Federal CCR Wells

Laboratory: Eurofins Cleveland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0806	12-31-26
Georgia	State	4062	02-27-26
Illinois	NELAP	200004	08-31-25
Iowa	State	421	06-01-25
Kansas	NELAP	E-10336	01-31-26
Kentucky (UST)	State	112225	02-28-26
Kentucky (WW)	State	KY98016	12-31-25
Minnesota	NELAP	039-999-348	12-31-25
New Hampshire	NELAP	225024	09-30-25
New Jersey	NELAP	OH001	07-03-25
New York	NELAP	10975	04-01-26
North Dakota	State	R-244	02-27-26
Ohio	State	8303	11-04-25
Ohio VAP	State	ORELAP 4062	02-28-26
Oregon	NELAP	4062	02-27-26
Pennsylvania	NELAP	68-00340	08-31-25
Texas	NELAP	T104704517-22-19	08-31-25
US Fish & Wildlife	US Federal Programs	A26406	02-28-26
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	09-14-25
West Virginia DEP	State	210	12-31-25
Wisconsin	State	399167560	08-31-25

Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
ANAB	Dept. of Defense ELAP	L2305	04-06-27
ANAB	Dept. of Energy	L2305.01	04-06-27
ANAB	ISO/IEC 17025	L2305	04-06-27
Arizona	State	AZ0813	12-08-25
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-25
Connecticut	State	PH-0241	03-31-27
Florida	NELAP	E87689	06-30-25
HI - RadChem Recognition	State	n/a	06-30-25
Illinois	NELAP	200023	11-30-25
Iowa	State	373	12-01-26
Kansas	NELAP	E-10236	10-31-25
Kentucky (DW)	State	KY90125	12-31-25
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-25
Louisiana (All)	NELAP	106151	06-30-25
Louisiana (DW)	State	LA011	12-31-25
Maryland	State	310	09-30-25
Massachusetts	State	M-MO054	06-30-25
MI - RadChem Recognition	State	9005	06-30-25
Missouri	State	780	06-30-25
Nevada	State	MO00054	07-31-25
New Jersey	NELAP	MO002	06-30-25

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-221677-1
Project/Site: Federal CCR Wells

Laboratory: Eurofins St. Louis (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New Mexico	State	MO00054	06-30-25
New York	NELAP	11616	03-31-26
North Carolina (DW)	State	29700	07-31-25
North Dakota	State	R-207	06-30-25
Oklahoma	NELAP	9997	08-31-25
Oregon	NELAP	4157	09-01-25
Pennsylvania	NELAP	68-00540	02-28-26
South Carolina	State	85002	06-30-25
Texas	NELAP	T104704193	07-31-25
US Fish & Wildlife	US Federal Programs	058448	07-31-25
USDA	US Federal Programs	525-23-138-94730	05-18-26
Utah	NELAP	MO00054	07-31-25
Virginia	NELAP	460230	06-14-25
Washington	State	C592	08-30-25
West Virginia DEP	State	381	10-31-25

0.0
0.0

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins
Environment Testing

Client Information	Sampler: Bobby Castle	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s):	COC No. 240-111832-39818.1
Client Contact: Taylor Huffman	Phone: 740-373-4308	E-Mail: roxanne.cisneros@et.eurofinsus.com	State of Origin:	Page: Page 1 of 8
Company: Lightstone Generation Gavin Power LLC	PWSID			Job #:
Address: 7397 OH-7	Due Date Requested:			
City: Cheshire	TAT Requested (days):			
State, Zip: OH, 45620	Compliance Project: Δ Yes Δ No			
Phone: 740-925-3171(Tel)	PO #: 2935505			
Email: taylor.huffman@lightstonegen.com	WO #:			
Project Name: Gavin CCR	Project #: 24019633			
Site: Gavin	SSOW#:			

Analysis Requested

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=wastestl, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B, 6020, 7470A	2540C_Calcd - TDS	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	300.0_28D - Chloride, Fluoride & Sulfate	2320B - (MOD) Alkalinity	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	D	N	D	N	N	X	
2016-10-F-20250401-01	4-1-25	1120	G	Water			1	1	2	1	1		
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									

240-221677 COC

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		4-3-25 / 1330	KEMRON			
2		4/4/25 3:45	Waypoint	Martin	4/4/25 1545	EVL
3						

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

Ver: 06/08/2021

Eurofins – Cleveland Sample Receipt Form/Narrative **Login # :**
Barberton Facility

Client Gavin Site Name

Cooler Received on 4/4/25 Opened on 4/4/25

Cooler unpacked by: KMartin

FedEx: 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other

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

Eurofins Cooler # EC 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 # 13 (CF +0.0 °C) Observed Cooler Temp 0.0 °C Corrected Cooler Temp. 0.0 °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity	Yes (No)	**Tests that are not checked for pH by Receiving**
-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)	**VOAs**
-Were tamper/custody seals intact and uncompromised?	Yes No (NA)	**Oil and Grease**
3 Shippers' packing slip attached to the cooler(s)?	Yes (No)	**TOC**
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# HC448976
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)	

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

4/5/2025

Login Container Summary Report

240-221677

5/7/2025

Temperature readings _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
2016-10-F-20250401-01	240-221677-A-1	Plastic 60 mL - unpreserved				
2016-10-F-20250401-01	240-221677-B-1	Plastic 60 mL - unpreserved				
2016-10-F-20250401-01	240-221677-C-1	Plastic 500ml - unpreserved				
2016-10-F-20250401-01	240-221677-D-1	Plastic 500ml - with Nitric Acid	<2			
2016-10-F-20250401-01	240-221677-E-1	Plastic 1 liter - Nitric Acid	<2			
2016-10-F-20250401-01	240-221677-F-1	Plastic 1 liter - Nitric Acid	<2			

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s): N/A	COC No: 240-200891.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: roxanne.cisneros@et.eurofinsus.com	State of Origin: Ohio	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): N/A		Job #: 240-221677-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 5/6/2025			Preservation Codes: -
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Federal GWM Wells	Project #: 24019633			
Site: N/A	SSOW#: N/A			Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9320_Ra228/PrecSep_0 Radium-228 (GFPC)	9315_Ra226/PrecSep_21 Radium-226 (GFPC)	Ra226Ra228_GFPC/ Combined Radium-226 and Radium-228	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
2016-10-F-20250401-01 (240-221677-1)	4/1/25	11:20 Eastern	G	Water			X	X	X	2	

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

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

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	4/7/25 0900	EC	Sierra Worthington	4/8/25 0825	EMSL
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: 10/10/2024

Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-221677-1

Login Number: 221677
List Number: 2
Creator: Worthington, Sierra M

List Source: Eurofins St. Louis
List Creation: 04/08/25 12:37 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?	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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620

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JOB DESCRIPTION

Federal CCR Wells

JOB NUMBER

240-222225-1

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

myEOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization

Roxanne Cisneros

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Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(330)497-9396

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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-222225-1

Qualifiers

Metals

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

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: 240-222225-1 Eurofins Cleveland

Job Narrative
240-222225-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 4/12/2025 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.1°C.

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

General Chemistry
Method 300.0_28D: The following sample was diluted due to the nature of the sample matrix: 2019-09-F-20250408-01 (240-222225-2). Elevated reporting limits (RLs) are provided.

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

Gas Flow Proportional Counter
Method 9315_Ra226: Radium 226 prep batch 160-712849

The barium carrier recovery is outside the upper control limit (110%) for the following sample: 2019-09-F-20250408-01 (240-222225-2). There was physical evidence of matrix interference apparent during the initial preparation of the sample. The QC samples associated with the batch have acceptable carrier recovery indicating the presence of matrix interference.

Method 9315_Ra226: Radium 226 Batch 712849

The Ba Carrier recovery is outside the upper control limit (110%) for the following sample: 2019-09-F-20250408-01 (240-222225-2). There was physical evidence of matrix interference apparent during the initial preparation of the sample. The QC samples associated with the batch have acceptable carrier recovery indicating the presence of matrix interference. Native has been applied and the sample has been truncated to minimize any potential bias a high carrier recovery may have on the results.

Method 9320_Ra228: Radium 228 prep batch 160-712850

The barium carrier recovery is outside the upper control limit (110%) for the following sample: 2019-09-F-20250408-01 (240-222225-2). There was physical evidence of matrix interference apparent during the initial preparation of the sample. The QC samples associated with the batch have acceptable carrier recovery indicating the presence of matrix interference.

Method 9320_Ra228: Radium-228 batch 712850
The following sample has a barium carrier recovery above the 110% QC limit. Affected samples had a barium correction applied, however, there is significant concentrations of salt-like compounds (i.e. calcium, magnesium, sodium, and strontium) that can interfere with a barium sulfate recovery. The LCS (laboratory control sample) has an acceptable spike recovery demonstrating acceptable sample preparation and instrument performance. The samples have been truncated to 100% to reduce any potential bias a high carrier recovery may have. The data have been qualified and reported. 2019-09-F-20250408-01 (240-222225-2)

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

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

Method Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-222225-1
Project/Site: Federal CCR Wells

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CLE
6020B	Metals (ICP/MS)	SW846	EET CLE
7470A	Mercury (CVAA)	SW846	EET CLE
2320 B-2021	Alkalinity	SM	EET CLE
2540 C-2020	Solids, Total Dissolved (TDS)	SM	EET CLE
300.0	Anions, Ion Chromatography	EPA	EET CLE
9315	Radium 226 by GFPC	SW846	EET SL
9320	Radium-228 (GFPC)	SW846	EET SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	EET SL
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CLE
7470A	Preparation, Mercury	SW846	EET CLE
PrecSep_0	Preparation, Precipitate Separation	None	EET SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	EET SL

Protocol References:

EPA = US Environmental Protection Agency

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:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

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

Sample Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-222225-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-222225-1	2019-07-F-20250408-01	Water	04/08/25 12:01	04/12/25 08:00
240-222225-2	2019-09-F-20250408-01	Water	04/08/25 14:47	04/12/25 08:00

Detection Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-222225-1

Client Sample ID: 2019-07-F-20250408-01 — Lab Sample ID: 240-222225-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	550		100	57	ug/L	1		6010D	Total Recoverable
Antimony	0.59	J	2.0	0.57	ug/L	1		6020B	Total Recoverable
Arsenic	1.9	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	660		5.0	0.77	ug/L	1		6020B	Total Recoverable
Cadmium	0.11	J	1.0	0.077	ug/L	1		6020B	Total Recoverable
Calcium	1200000		20000	5100	ug/L	20		6020B	Total Recoverable
Chromium	31		5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	10		1.0	0.086	ug/L	1		6020B	Total Recoverable
Lead	1.2		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	330		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	280000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	17		5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	23000		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	10000000		20000	18000	ug/L	20		6020B	Total Recoverable
Total Alkalinity	230		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	230		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	23000		1000	780	mg/L	1		2540 C-2020	Total/NA
Chloride	23000		1000	130	mg/L	1000		300.0	Total/NA
Sulfate	300		100	35	mg/L	100		300.0	Total/NA

Client Sample ID: 2019-09-F-20250408-01 — Lab Sample ID: 240-222225-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	420		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	3.8	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	31000		100	15	ug/L	20		6020B	Total Recoverable
Calcium	1200000		20000	5100	ug/L	20		6020B	Total Recoverable
Chromium	15		5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	4.1		1.0	0.086	ug/L	1		6020B	Total Recoverable
Lead	2.4		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	290		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	290000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	23		5.0	1.1	ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland

Client Sample ID: 2019-09-F-20250408-01 (Continued)
Lab Sample ID: 240-222225-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	25000		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	10000000		20000	18000	ug/L	20		6020B	Total Recoverable
Total Alkalinity	170		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	170		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	26000		1000	780	mg/L	1		2540 C-2020	Total/NA
Chloride	22000		1000	130	mg/L	1000		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 2019-07-F-20250408-01
Date Collected: 04/08/25 12:01
Date Received: 04/12/25 08:00

Lab Sample ID: 240-222225-1
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	550		100	57	ug/L		04/14/25 14:00	04/19/25 01:45	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.59	J	2.0	0.57	ug/L		04/14/25 14:00	04/16/25 16:42	1
Arsenic	1.9	J	5.0	0.75	ug/L		04/14/25 14:00	04/16/25 16:42	1
Barium	660		5.0	0.77	ug/L		04/14/25 14:00	04/16/25 16:42	1
Beryllium	ND		1.0	0.27	ug/L		04/14/25 14:00	04/16/25 16:42	1
Cadmium	0.11	J	1.0	0.077	ug/L		04/14/25 14:00	04/16/25 16:42	1
Calcium	1200000		20000	5100	ug/L		04/14/25 14:00	04/17/25 15:25	20
Chromium	31		5.0	1.2	ug/L		04/14/25 14:00	04/16/25 16:42	1
Cobalt	10		1.0	0.086	ug/L		04/14/25 14:00	04/16/25 16:42	1
Lead	1.2		1.0	0.45	ug/L		04/14/25 14:00	04/16/25 16:42	1
Lithium	330		8.0	3.4	ug/L		04/14/25 14:00	04/16/25 16:42	1
Magnesium	280000		1000	61	ug/L		04/14/25 14:00	04/16/25 16:42	1
Molybdenum	17		5.0	1.1	ug/L		04/14/25 14:00	04/16/25 16:42	1
Potassium	23000		1000	220	ug/L		04/14/25 14:00	04/16/25 16:42	1
Selenium	ND		5.0	0.89	ug/L		04/14/25 14:00	04/16/25 16:42	1
Sodium	10000000		20000	18000	ug/L		04/14/25 14:00	04/17/25 15:25	20
Thallium	ND		1.0	0.51	ug/L		04/14/25 14:00	04/16/25 16:42	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		04/14/25 14:00	04/15/25 13:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	230		5.0	2.6	mg/L			04/15/25 18:31	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	230		5.0	2.6	mg/L			04/15/25 18:31	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			04/15/25 18:31	1
Total Dissolved Solids (SM 2540 C-2020)	23000		1000	780	mg/L			04/15/25 10:39	1
Chloride (EPA 300.0)	23000		1000	130	mg/L			04/22/25 16:46	1000
Fluoride (EPA 300.0)	ND		5.0	2.4	mg/L			04/22/25 16:37	100
Sulfate (EPA 300.0)	300		100	35	mg/L			04/22/25 16:37	100

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.533	U	0.386	0.389	1.00	0.541	pCi/L	04/17/25 07:46	05/15/25 16:45	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*104*		*30 - 110*	*04/17/25 07:46*	*05/15/25 16:45*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	2.49		0.791	0.823	1.00	0.929	pCi/L	04/17/25 07:49	05/15/25 11:59	1

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-222225-1

Client Sample ID: 2019-07-F-20250408-01
Date Collected: 04/08/25 12:01
Date Received: 04/12/25 08:00

Lab Sample ID: 240-222225-1
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*104*		*30 - 110*	*04/17/25 07:49*	*05/15/25 11:59*	*1*
Y Carrier	*82.2*		*30 - 110*	*04/17/25 07:49*	*05/15/25 11:59*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**3.03**		0.880	0.910	5.00	0.929	pCi/L		05/15/25 17:39	1

Client Sample ID: 2019-09-F-20250408-01
Date Collected: 04/08/25 14:47
Date Received: 04/12/25 08:00

Lab Sample ID: 240-222225-2
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**420**		100	57	ug/L		04/14/25 14:00	04/19/25 01:50	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		04/14/25 14:00	04/16/25 16:44	1
Arsenic	**3.8**	**J**	5.0	0.75	ug/L		04/14/25 14:00	04/16/25 16:44	1
Barium	**31000**		100	15	ug/L		04/14/25 14:00	04/17/25 15:28	20
Beryllium	ND		1.0	0.27	ug/L		04/14/25 14:00	04/16/25 16:44	1
Cadmium	ND		1.0	0.077	ug/L		04/14/25 14:00	04/16/25 16:44	1
Calcium	**1200000**		20000	5100	ug/L		04/14/25 14:00	04/17/25 15:28	20
Chromium	**15**		5.0	1.2	ug/L		04/14/25 14:00	04/16/25 16:44	1
Cobalt	**4.1**		1.0	0.086	ug/L		04/14/25 14:00	04/16/25 16:44	1
Lead	**2.4**		1.0	0.45	ug/L		04/14/25 14:00	04/16/25 16:44	1
Lithium	**290**		8.0	3.4	ug/L		04/14/25 14:00	04/16/25 16:44	1
Magnesium	**290000**		1000	61	ug/L		04/14/25 14:00	04/16/25 16:44	1
Molybdenum	**23**		5.0	1.1	ug/L		04/14/25 14:00	04/16/25 16:44	1
Potassium	**25000**		1000	220	ug/L		04/14/25 14:00	04/16/25 16:44	1
Selenium	ND		5.0	0.89	ug/L		04/14/25 14:00	04/16/25 16:44	1
Sodium	**10000000**		20000	18000	ug/L		04/14/25 14:00	04/17/25 15:28	20
Thallium	ND		1.0	0.51	ug/L		04/14/25 14:00	04/16/25 16:44	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		04/14/25 14:00	04/15/25 13:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	**170**		5.0	2.6	mg/L			04/15/25 18:26	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**170**		5.0	2.6	mg/L			04/15/25 18:26	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			04/15/25 18:26	1
Total Dissolved Solids (SM 2540 C-2020)	**26000**		1000	780	mg/L			04/15/25 10:39	1
Chloride (EPA 300.0)	**22000**		1000	130	mg/L			04/22/25 17:23	1000
Fluoride (EPA 300.0)	ND		5.0	2.4	mg/L			04/22/25 16:55	100
Sulfate (EPA 300.0)	ND		100	35	mg/L			04/22/25 16:55	100

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**28.1**		2.11	3.30	1.00	0.605	pCi/L	04/17/25 07:46	05/15/25 16:45	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*275*	*X*	*30 - 110*	*04/17/25 07:46*	*05/15/25 16:45*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**88.2**		3.15	8.70	1.00	0.750	pCi/L	04/17/25 07:49	05/15/25 11:54	1

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-222225-1

Client Sample ID: 2019-09-F-20250408-01
Date Collected: 04/08/25 14:47
Date Received: 04/12/25 08:00

Lab Sample ID: 240-222225-2
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*175*	*X*	*30 - 110*	*04/17/25 07:49*	*05/15/25 11:54*	*1*
Y Carrier	*77.4*		*30 - 110*	*04/17/25 07:49*	*05/15/25 11:54*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**116**		3.79	9.30	5.00	0.750	pCi/L		05/15/25 17:39	1

Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-222225-1

Method: 9315 - Radium 226 by GFPC

Matrix: Water **Prep Type: Total/NA**

		Percent Yield (Acceptance Limits)							
		Ba							
Lab Sample ID	Client Sample ID	(30-110)							
240-222225-1	2019-07-F-20250408-01	104							
240-222225-2	2019-09-F-20250408-01	275 X							
LCS 160-712849/2-A	Lab Control Sample	87.1							
MB 160-712849/1-A	Method Blank	87.4							

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	(30-110)	(30-110)						
240-222225-1	2019-07-F-20250408-01	104	82.2						
240-222225-2	2019-09-F-20250408-01	175 X	77.4						
LCS 160-712850/2-A	Lab Control Sample	87.1	84.1						
MB 160-712850/1-A	Method Blank	87.4	83.0						

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-652041/1-A
Matrix: Water
Analysis Batch: 652471

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 652041

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		04/14/25 14:00	04/16/25 19:43	1

Lab Sample ID: LCS 240-652041/2-A
Matrix: Water
Analysis Batch: 652471

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 652041

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1000	1100		ug/L		110	80 - 120

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-652041/1-A
Matrix: Water
Analysis Batch: 652412

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 652041

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		04/14/25 14:00	04/16/25 15:42	1
Arsenic	ND		5.0	0.75	ug/L		04/14/25 14:00	04/16/25 15:42	1
Barium	ND		5.0	0.77	ug/L		04/14/25 14:00	04/16/25 15:42	1
Beryllium	ND		1.0	0.27	ug/L		04/14/25 14:00	04/16/25 15:42	1
Cadmium	ND		1.0	0.077	ug/L		04/14/25 14:00	04/16/25 15:42	1
Calcium	ND		1000	250	ug/L		04/14/25 14:00	04/16/25 15:42	1
Chromium	ND		5.0	1.2	ug/L		04/14/25 14:00	04/16/25 15:42	1
Cobalt	ND		1.0	0.086	ug/L		04/14/25 14:00	04/16/25 15:42	1
Lead	ND		1.0	0.45	ug/L		04/14/25 14:00	04/16/25 15:42	1
Lithium	ND		8.0	3.4	ug/L		04/14/25 14:00	04/16/25 15:42	1
Magnesium	ND		1000	61	ug/L		04/14/25 14:00	04/16/25 15:42	1
Molybdenum	ND		5.0	1.1	ug/L		04/14/25 14:00	04/16/25 15:42	1
Potassium	ND		1000	220	ug/L		04/14/25 14:00	04/16/25 15:42	1
Selenium	ND		5.0	0.89	ug/L		04/14/25 14:00	04/16/25 15:42	1
Sodium	ND		1000	880	ug/L		04/14/25 14:00	04/16/25 15:42	1
Thallium	ND		1.0	0.51	ug/L		04/14/25 14:00	04/16/25 15:42	1

Lab Sample ID: LCS 240-652041/3-A
Matrix: Water
Analysis Batch: 652412

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 652041

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	94.9		ug/L		95	80 - 120
Arsenic	1000	938		ug/L		94	80 - 120
Barium	1000	929		ug/L		93	80 - 120
Beryllium	500	493		ug/L		99	80 - 120
Cadmium	500	465		ug/L		93	80 - 120
Calcium	25000	24100		ug/L		96	80 - 120
Chromium	500	481		ug/L		96	80 - 120
Cobalt	500	495		ug/L		99	80 - 120
Lead	500	511		ug/L		102	80 - 120
Lithium	500	496		ug/L		99	80 - 120
Magnesium	25000	24800		ug/L		99	80 - 120

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

Lab Sample ID: LCS 240-652041/3-A
Matrix: Water
Analysis Batch: 652412

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 652041

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Molybdenum	500	470		ug/L		94	80 - 120
Potassium	25000	24500		ug/L		98	80 - 120
Selenium	1000	912		ug/L		91	80 - 120
Sodium	25000	24200		ug/L		97	80 - 120
Thallium	1000	1090		ug/L		109	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-652045/1-A
Matrix: Water
Analysis Batch: 652241

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 652045

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		04/14/25 14:00	04/15/25 13:10	1

Lab Sample ID: LCS 240-652045/2-A
Matrix: Water
Analysis Batch: 652241

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 652045

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.07		ug/L		101	80 - 120

Method: 2320 B-2021 - Alkalinity

Lab Sample ID: MB 240-652418/4
Matrix: Water
Analysis Batch: 652418

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	ND		5.0	2.6	mg/L			04/15/25 16:49	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/15/25 16:49	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			04/15/25 16:49	1

Lab Sample ID: LCS 240-652418/3
Matrix: Water
Analysis Batch: 652418

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	280	269		mg/L		96	86 - 123

Method: 2540 C-2020 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 240-652181/1
Matrix: Water
Analysis Batch: 652181

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	ND		10	7.8	mg/L			04/15/25 10:39	1

Method: 2540 C-2020 - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCS 240-652181/2
Matrix: Water
Analysis Batch: 652181

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	176	156		mg/L		89	80 - 120

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-653129/3
Matrix: Water
Analysis Batch: 653129

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.13	mg/L			04/22/25 15:33	1
Fluoride	ND		0.050	0.024	mg/L			04/22/25 15:33	1
Sulfate	ND		1.0	0.35	mg/L			04/22/25 15:33	1

Lab Sample ID: LCS 240-653129/4
Matrix: Water
Analysis Batch: 653129

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	47.3		mg/L		95	90 - 110
Fluoride	2.50	2.41		mg/L		96	90 - 110
Sulfate	50.0	46.9		mg/L		94	90 - 110

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-712849/1-A
Matrix: Water
Analysis Batch: 717687

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 712849

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.1921	U	0.174	0.175	1.00	0.252	pCi/L	04/17/25 07:46	05/15/25 16:29	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.4*		*30 - 110*	*04/17/25 07:46*	*05/15/25 16:29*	*1*

Lab Sample ID: LCS 160-712849/2-A
Matrix: Water
Analysis Batch: 717682

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 712849

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226	9.58	8.939		1.22	1.00	0.308	pCi/L	93	75 - 125

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*87.1*		*30 - 110*

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-222225-1

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-712850/1-A
Matrix: Water
Analysis Batch: 717682

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 712850

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.02966	U	0.295	0.295	1.00	0.562	pCi/L	04/17/25 07:49	05/15/25 11:58	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.4*		*30 - 110*	*04/17/25 07:49*	*05/15/25 11:58*	*1*
Y Carrier	*83.0*		*30 - 110*	*04/17/25 07:49*	*05/15/25 11:58*	*1*

Lab Sample ID: LCS 160-712850/2-A
Matrix: Water
Analysis Batch: 717682

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 712850

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228			9.44	10.97		1.45	1.00	0.556	pCi/L	116	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*87.1*		*30 - 110*
Y Carrier	*84.1*		*30 - 110*

Metals

Prep Batch: 652041

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-222225-1	2019-07-F-20250408-01	Total Recoverable	Water	3005A	
240-222225-2	2019-09-F-20250408-01	Total Recoverable	Water	3005A	
MB 240-652041/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-652041/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-652041/3-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 652045

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-222225-1	2019-07-F-20250408-01	Total/NA	Water	7470A	
240-222225-2	2019-09-F-20250408-01	Total/NA	Water	7470A	
MB 240-652045/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-652045/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 652241

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-222225-1	2019-07-F-20250408-01	Total/NA	Water	7470A	652045
240-222225-2	2019-09-F-20250408-01	Total/NA	Water	7470A	652045
MB 240-652045/1-A	Method Blank	Total/NA	Water	7470A	652045
LCS 240-652045/2-A	Lab Control Sample	Total/NA	Water	7470A	652045

Analysis Batch: 652412

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-222225-1	2019-07-F-20250408-01	Total Recoverable	Water	6020B	652041
240-222225-2	2019-09-F-20250408-01	Total Recoverable	Water	6020B	652041
MB 240-652041/1-A	Method Blank	Total Recoverable	Water	6020B	652041
LCS 240-652041/3-A	Lab Control Sample	Total Recoverable	Water	6020B	652041

Analysis Batch: 652471

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-652041/1-A	Method Blank	Total Recoverable	Water	6010D	652041
LCS 240-652041/2-A	Lab Control Sample	Total Recoverable	Water	6010D	652041

Analysis Batch: 652653

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-222225-1	2019-07-F-20250408-01	Total Recoverable	Water	6020B	652041
240-222225-2	2019-09-F-20250408-01	Total Recoverable	Water	6020B	652041

Analysis Batch: 652748

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-222225-1	2019-07-F-20250408-01	Total Recoverable	Water	6010D	652041
240-222225-2	2019-09-F-20250408-01	Total Recoverable	Water	6010D	652041

General Chemistry

Analysis Batch: 652181

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-222225-1	2019-07-F-20250408-01	Total/NA	Water	2540 C-2020	
240-222225-2	2019-09-F-20250408-01	Total/NA	Water	2540 C-2020	
MB 240-652181/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-652181/2	Lab Control Sample	Total/NA	Water	2540 C-2020	

General Chemistry

Analysis Batch: 652418

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-222225-1	2019-07-F-20250408-01	Total/NA	Water	2320 B-2021	
240-222225-2	2019-09-F-20250408-01	Total/NA	Water	2320 B-2021	
MB 240-652418/4	Method Blank	Total/NA	Water	2320 B-2021	
LCS 240-652418/3	Lab Control Sample	Total/NA	Water	2320 B-2021	

Analysis Batch: 653129

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-222225-1	2019-07-F-20250408-01	Total/NA	Water	300.0	
240-222225-1	2019-07-F-20250408-01	Total/NA	Water	300.0	
240-222225-2	2019-09-F-20250408-01	Total/NA	Water	300.0	
240-222225-2	2019-09-F-20250408-01	Total/NA	Water	300.0	
MB 240-653129/3	Method Blank	Total/NA	Water	300.0	
LCS 240-653129/4	Lab Control Sample	Total/NA	Water	300.0	

Rad

Prep Batch: 712849

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-222225-1	2019-07-F-20250408-01	Total/NA	Water	PrecSep-21	
240-222225-2	2019-09-F-20250408-01	Total/NA	Water	PrecSep-21	
MB 160-712849/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-712849/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 712850

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-222225-1	2019-07-F-20250408-01	Total/NA	Water	PrecSep_0	
240-222225-2	2019-09-F-20250408-01	Total/NA	Water	PrecSep_0	
MB 160-712850/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-712850/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-222225-1
Project/Site: Federal CCR Wells

Client Sample ID: 2019-07-F-20250408-01
Lab Sample ID: 240-222225-1

Date Collected: 04/08/25 12:01
Matrix: Water
Date Received: 04/12/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			652041	BN	EET CLE	04/14/25 14:00
Total Recoverable	Analysis	6010D		1	652748	AJC	EET CLE	04/19/25 01:45
Total Recoverable	Prep	3005A			652041	BN	EET CLE	04/14/25 14:00
Total Recoverable	Analysis	6020B		20	652653	S4FJ	EET CLE	04/17/25 15:25
Total Recoverable	Prep	3005A			652041	BN	EET CLE	04/14/25 14:00
Total Recoverable	Analysis	6020B		1	652412	S4FJ	EET CLE	04/16/25 16:42
Total/NA	Prep	7470A			652045	BN	EET CLE	04/14/25 14:00
Total/NA	Analysis	7470A		1	652241	GEV	EET CLE	04/15/25 13:45
Total/NA	Analysis	2320 B-2021		1	652418	PQD2	EET CLE	04/15/25 18:31
Total/NA	Analysis	2540 C-2020		1	652181	TAV2	EET CLE	04/15/25 10:39
Total/NA	Analysis	300.0		100	653129	JMR	EET CLE	04/22/25 16:37
Total/NA	Analysis	300.0		1000	653129	JMR	EET CLE	04/22/25 16:46
Total/NA	Prep	PrecSep-21			712849	OGC	EET SL	04/17/25 07:46
Total/NA	Analysis	9315		1	717682	SWS	EET SL	05/15/25 16:45
Total/NA	Prep	PrecSep_0			712850	OGC	EET SL	04/17/25 07:49
Total/NA	Analysis	9320		1	717682	SWS	EET SL	05/15/25 11:59
Total/NA	Analysis	Ra226_Ra228		1	717733	SCB	EET SL	05/15/25 17:39

Client Sample ID: 2019-09-F-20250408-01
Lab Sample ID: 240-222225-2

Date Collected: 04/08/25 14:47
Matrix: Water
Date Received: 04/12/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			652041	BN	EET CLE	04/14/25 14:00
Total Recoverable	Analysis	6010D		1	652748	AJC	EET CLE	04/19/25 01:50
Total Recoverable	Prep	3005A			652041	BN	EET CLE	04/14/25 14:00
Total Recoverable	Analysis	6020B		20	652653	S4FJ	EET CLE	04/17/25 15:28
Total Recoverable	Prep	3005A			652041	BN	EET CLE	04/14/25 14:00
Total Recoverable	Analysis	6020B		1	652412	S4FJ	EET CLE	04/16/25 16:44
Total/NA	Prep	7470A			652045	BN	EET CLE	04/14/25 14:00
Total/NA	Analysis	7470A		1	652241	GEV	EET CLE	04/15/25 13:50
Total/NA	Analysis	2320 B-2021		1	652418	PQD2	EET CLE	04/15/25 18:26
Total/NA	Analysis	2540 C-2020		1	652181	TAV2	EET CLE	04/15/25 10:39
Total/NA	Analysis	300.0		100	653129	JMR	EET CLE	04/22/25 16:55
Total/NA	Analysis	300.0		1000	653129	JMR	EET CLE	04/22/25 17:23
Total/NA	Prep	PrecSep-21			712849	OGC	EET SL	04/17/25 07:46
Total/NA	Analysis	9315		1	717682	SWS	EET SL	05/15/25 16:45
Total/NA	Prep	PrecSep_0			712850	OGC	EET SL	04/17/25 07:49
Total/NA	Analysis	9320		1	717690	SWS	EET SL	05/15/25 11:54
Total/NA	Analysis	Ra226_Ra228		1	717733	SCB	EET SL	05/15/25 17:39

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

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

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-222225-1
Project/Site: Federal CCR Wells

Laboratory: Eurofins Cleveland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0806	12-31-26
Georgia	State	4062	02-27-26
Illinois	NELAP	200004	08-31-25
Iowa	State	421	06-01-25
Kansas	NELAP	E-10336	01-31-26
Kentucky (UST)	State	112225	02-28-26
Kentucky (WW)	State	KY98016	12-31-25
Minnesota	NELAP	039-999-348	12-31-25
New Hampshire	NELAP	225024	09-30-25
New Jersey	NELAP	OH001	07-03-25
New York	NELAP	10975	04-01-26
North Dakota	State	R-244	02-27-26
Ohio	State	8303	11-04-25
Ohio VAP	State	ORELAP 4062	02-28-26
Oregon	NELAP	4062	02-27-26
Pennsylvania	NELAP	68-00340	08-31-25
Texas	NELAP	T104704517-22-19	08-31-25
US Fish & Wildlife	US Federal Programs	A26406	02-28-26
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	09-14-25
West Virginia DEP	State	210	12-31-25
Wisconsin	State	399167560	08-31-25

Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-27
ANAB	Dept. of Defense ELAP	L2305	04-06-27
ANAB	Dept. of Energy	L2305.01	04-06-27
ANAB	ISO/IEC 17025	L2305	04-06-27
Arizona	State	AZ0813	12-08-25
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	06-30-25
Connecticut	State	PH-0241	03-31-27
Florida	NELAP	E87689	06-30-25
HI - RadChem Recognition	State	n/a	06-30-25
Illinois	NELAP	200023	11-30-25
Iowa	State	373	12-01-26
Kansas	NELAP	E-10236	10-31-25
Kentucky (DW)	State	KY90125	12-31-25
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-25
Louisiana (All)	NELAP	106151	06-30-25
Louisiana (DW)	State	LA011	12-31-25
Maryland	State	310	09-30-25
Massachusetts	State	M-MO054	06-30-25
MI - RadChem Recognition	State	9005	06-30-25
Missouri	State	780	06-30-25
Nevada	State	MO00054	07-31-25

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-222225-1
Project/Site: Federal CCR Wells

Laboratory: Eurofins St. Louis (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New Jersey	NELAP	MO002	06-30-25
New Mexico	State	MO00054	06-30-25
New York	NELAP	11616	03-31-26
North Carolina (DW)	State	29700	07-31-25
North Dakota	State	R-207	06-30-25
Oklahoma	NELAP	9997	08-31-25
Oregon	NELAP	4157	09-01-25
Pennsylvania	NELAP	68-00540	02-28-26
South Carolina	State	85002	06-30-25
Texas	NELAP	T104704193	07-31-25
US Fish & Wildlife	US Federal Programs	058448	07-31-25
USDA	US Federal Programs	525-23-138-94730	05-18-26
Utah	NELAP	MO00054	07-31-25
Virginia	NELAP	460230	06-14-25
Washington	State	C592	08-30-25
West Virginia DEP	State	381	10-31-25

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

4-2/4-1

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Client Information	Sampler: Bobby Casto	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s):	COC No. 240-111832-39818.1
Client Contact: Taylor Huffman	Phone: 740-373-4308	E-Mail: roxanne.cisneros@et.eurofinsus.com	State of Origin:	Page: Page 1 of 8
Company: Lightstone Generation Gavin Power LLC	PWSID			Job #:
Address: 7397 OH-7	Due Date Requested:			
City: Cheshire	TAT Requested (days):			
State, Zip: OH, 45620	Compliance Project: Δ Yes Δ No			
Phone: 740-925-3171(Tel)	PO #: 2935505			
Email: taylor.huffman@lightstonegen.com	WO #:			
Project Name: Gavin CCR	Project #: 24019633			
Site: Gavin	SSOW#:			

Analysis Requested

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wastoil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B, 6020, 7470A	2540C_Calcd - TDS	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	300.0_28D - Chloride, Fluoride & Sulfate	2320B - (MOD) Alkalinity	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	N	D	N	N		
2019-07-F-20250408-01	4-8-25	1201	6	Water			1	1	2	1	1		* 2019-07 limited Ra Sample ~1900mL
2019-09-F-20250408-01	4-8-25	1447	6	Water			1	1	2	1	1		
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									

240-222225 COC

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
Ryan Smith	4-10-25/0940	Kemron	B Smith	4.11.25 1115	WP
Relinquished by: B Smith	Date/Time: 4.11.25 1452	Company WP	Received by: KATHARINE MARTIN	Date/Time: 4/12/25 800	Company EUL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 06/08/2021

Eurofins – Cleveland Sample Receipt Form/Narrative **Login #** _____
Barberton Facility

Client Cavin Site Name _____ Cooler unpacked by: KMartin

Cooler Received on 4/12/25 Opened on 4/12/25

FedEx: 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other _____

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

Eurofins Cooler # EC 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 # 18 (CF -0.1 °C) Observed Cooler Temp. 4.2 °C Corrected Cooler Temp. 4.1 °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity_____	Yes (No)	**Tests that are not checked for pH by Receiving**
-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)	**VOAs**
-Were tamper/custody seals intact and uncompromised?	Yes No (NA)	**Oil and Grease**
3 Shippers' packing slip attached to the cooler(s)?	Yes (No)	**TOC**
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# HC457151
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)	

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 _____

4/12/2025

Login Container Summary Report

240-222225

5/16/2025

Temperature readings _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
2019-07-F-20250408-01	240-222225-A-1	Plastic 60 mL - unpreserved				
2019-07-F-20250408-01	240-222225-B-1	Plastic 60 mL - unpreserved				
2019-07-F-20250408-01	240-222225-C-1	Plastic 500ml - unpreserved				
2019-07-F-20250408-01	240-222225-D-1	Plastic 500ml - with Nitric Acid	<2			
2019-07-F-20250408-01	240-222225-E-1	Plastic 1 liter - Nitric Acid	<2			
2019-07-F-20250408-01	240-222225-F-1	Plastic 1 liter - Nitric Acid	<2			
2019-09-F-20250408-01	240-222225-A-2	Plastic 60 mL - unpreserved				
2019-09-F-20250408-01	240-222225-B-2	Plastic 60 mL - unpreserved				
2019-09-F-20250408-01	240 222225-C-2	Plastic 500ml - unpreserved				
2019-09-F-20250408-01	240-222225-D-2	Plastic 500ml - with Nitric Acid	<2			
2019-09-F-20250408-01	240-222225-E-2	Plastic 1 liter - Nitric Acid	<2			
2019-09-F-20250408-01	240-222225-F-2	Plastic 1 liter - Nitric Acid	<2			

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s): N/A	COC No: 240-201201.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: roxanne.cisneros@et.eurofinsus.com	State of Origin: Ohio	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): N/A		Job #: 240-222225-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 4/28/2025			
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Federal GWM Wells	Project #: 24019633			
Site: N/A	SSOW#: N/A			

Analysis Requested

Preservation Codes: -

Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9320_Ra228/PrecSep_0 Radium-228 (GFPC)	9315_Ra226/PrecSep_21 Radium-226 (GFPC)	Ra226Ra228_GFPC/ Combined Radium-226 and Radium-228	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
2019-07-F-20250408-01 (240-222225-1)	4/8/25	12:01 Eastern	G	Water			X	X	X	2	
2019-09-F-20250408-01 (240-222225-2)	4/8/25	14:47 Eastern	G	Water			X	X	X	2	

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

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

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

Relinquished by: MALISSA LOAR	Date/Time: 4/14/25 8am	Company	Received by: [signature]	Date/Time: 0830 APR 16 2025	Company
Relinquished by:	Date/Time:	Company	Received by: Cheyenne Forrest	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: 10/10/2024

5/16/2025

Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-222225-1

Login Number: 222225
List Number: 2
Creator: Forrest, Cheyenne L

List Source: Eurofins St. Louis
List Creation: 04/16/25 11:02 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?	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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620
Generated 10/15/2025 3:38:31 PM

JOB DESCRIPTION

Federal CCR Wells

JOB NUMBER

240-232994-1

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

myEOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization

Roxanne Cisneros

Generated
10/15/2025 3:38:31 PM

Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(330)497-9396

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Qualifiers

Metals

Qualifier	Qualifier Description
^2	Calibration Blank (ICB and/or CCB) is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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: 240-232994-1 — Eurofins Cleveland

Job Narrative
240-232994-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The samples were received on 9/13/2025 1:00 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 16 coolers at receipt time were 0.4°C, 0.5°C, 0.6°C, 0.7°C, 0.8°C, 0.9°C, 1.3°C, 1.4°C, 1.5°C, 1.6°C, 1.9°C, 3.3°C, 3.5°C, 3.9°C, 4.2°C and 19.0°C.

Metals
Method 6020B - Total Recoverable: The continuing calibration blank (CCB) for analytical batch 240-671935 contained sodium above the reporting limit (RL). All reported samples associated with this CCB contained this analyte at a concentration greater than 10X the value found in the CCB; therefore, re-analysis of samples was not performed.2022-06-F-20250911-01 (240-232994-4), 96158-F-20250911-01 (240-232994-5), DUP-001-F-20250911-01 (240-232994-6) and 96157-F-20250911-01 (240-232994-7)

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

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

Gas Flow Proportional Counter
Method 9320_Ra228: Radium 228 Batch 736723

The detection goal was not met for the following sample due to a reduced sample volume used in prep attributed to the presence of matrix interferences. 2016-06-F-20250910-01 (240-232994-2), 2016-07-F-20250911-01 (240-232994-3) and 2022-06-F-20250911-01 (240-232994-4)

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

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

Method Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-232994-1

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CLE
6020B	Metals (ICP/MS)	SW846	EET CLE
7470A	Mercury (CVAA)	SW846	EET CLE
2320 B-2021	Alkalinity	SM	EET CLE
2540 C-2020	Solids, Total Dissolved (TDS)	SM	EET CLE
300.0	Anions, Ion Chromatography	EPA	EET CLE
9315	Radium 226 by GFPC	SW846	EET SL
9320	Radium-228 (GFPC)	SW846	EET SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	EET SL
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CLE
7470A	Preparation, Mercury	SW846	EET CLE
PrecSep_0	Preparation, Precipitate Separation	None	EET SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	EET SL

Protocol References:

EPA = US Environmental Protection Agency

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:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

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

Sample Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-232994-1
Project/Site: Federal CCR Wells

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
240-232994-1	2016-10-F-20250910-01	Water	09/10/25 11:33	09/13/25 13:00	Ohio
240-232994-2	2016-06-F-20250910-01	Water	09/10/25 14:37	09/13/25 13:00	Ohio
240-232994-3	2016-07-F-20250911-01	Water	09/11/25 11:03	09/13/25 13:00	Ohio
240-232994-4	2022-06-F-20250911-01	Water	09/11/25 12:53	09/13/25 13:00	Ohio
240-232994-5	96158-F-20250911-01	Water	09/11/25 13:47	09/13/25 13:00	Ohio
240-232994-6	DUP-001-F-20250911-01	Water	09/11/25 00:00	09/13/25 13:00	Ohio
240-232994-7	96157-F-20250911-01	Water	09/11/25 14:36	09/13/25 13:00	Ohio

Detection Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-232994-1

Client Sample ID: 2016-10-F-20250910-01 — Lab Sample ID: 240-232994-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	360		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	3.3	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	1500		5.0	0.77	ug/L	1		6020B	Total Recoverable
Calcium	760000		1000	250	ug/L	1		6020B	Total Recoverable
Cobalt	0.39	J B	1.0	0.086	ug/L	1		6020B	Total Recoverable
Lithium	350		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	270000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	17		5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	64000		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	8600000		10000	8800	ug/L	10		6020B	Total Recoverable
Total Alkalinity	29		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	29		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	27000		1000	780	mg/L	1		2540 C-2020	Total/NA
Chloride	20000		100	13	mg/L	100		300.0	Total/NA
Sulfate	99	J	100	35	mg/L	100		300.0	Total/NA

Client Sample ID: 2016-06-F-20250910-01 — Lab Sample ID: 240-232994-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	480		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	1.4	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	61		5.0	0.77	ug/L	1		6020B	Total Recoverable
Calcium	5000		1000	250	ug/L	1		6020B	Total Recoverable
Chromium	3.6	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	0.44	J B	1.0	0.086	ug/L	1		6020B	Total Recoverable
Lead	0.65	J	1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	21		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	1400		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	56		5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	2300		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	660000		1000	880	ug/L	1		6020B	Total Recoverable
Total Alkalinity	470		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	440		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Carbonate Alkalinity as CaCO3	33		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	1600		20	16	mg/L	1		2540 C-2020	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland

Client Sample ID: 2016-06-F-20250910-01 (Continued) — Lab Sample ID: 240-232994-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	610		10	1.3	mg/L	10		300.0	Total/NA
Fluoride	5.1		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	91		1.0	0.35	mg/L	1		300.0	Total/NA

Client Sample ID: 2016-07-F-20250911-01 — Lab Sample ID: 240-232994-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	450		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	2.4	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	670		5.0	0.77	ug/L	1		6020B	Total Recoverable
Calcium	29000		1000	250	ug/L	1		6020B	Total Recoverable
Chromium	2.6	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	0.56	J B	1.0	0.086	ug/L	1		6020B	Total Recoverable
Lead	0.90	J	1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	50		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	6000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	53		5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	6100		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	1100000		10000	8800	ug/L	10		6020B	Total Recoverable
Total Alkalinity	400		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	400		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	2600		50	39	mg/L	1		2540 C-2020	Total/NA
Chloride	1400		20	2.6	mg/L	20		300.0	Total/NA
Fluoride	2.7		0.25	0.12	mg/L	5		300.0	Total/NA
Sulfate	22		5.0	1.7	mg/L	5		300.0	Total/NA

Client Sample ID: 2022-06-F-20250911-01 — Lab Sample ID: 240-232994-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	110		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	1.9	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	340		5.0	0.77	ug/L	1		6020B	Total Recoverable
Calcium	57000		1000	250	ug/L	1		6020B	Total Recoverable
Cobalt	1.2	B	1.0	0.086	ug/L	1		6020B	Total Recoverable
Lead	0.46	J	1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	16		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	12000		1000	61	ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: 2022-06-F-20250911-01 (Continued) — Lab Sample ID: 240-232994-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Molybdenum	7.9		5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	1600		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	250000	^2	1000	880	ug/L	1		6020B	Total Recoverable
Total Alkalinity	530		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	530		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	710		10	7.8	mg/L	1		2540 C-2020	Total/NA
Chloride	75		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	1.0		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	14		1.0	0.35	mg/L	1		300.0	Total/NA

Client Sample ID: 96158-F-20250911-01 — Lab Sample ID: 240-232994-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	370		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	0.80	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	360		5.0	0.77	ug/L	1		6020B	Total Recoverable
Calcium	68000		1000	250	ug/L	1		6020B	Total Recoverable
Cobalt	0.63	J B	1.0	0.086	ug/L	1		6020B	Total Recoverable
Lithium	34		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	14000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	9.1		5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	3400		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	700000	^2	1000	880	ug/L	1		6020B	Total Recoverable
Total Alkalinity	320		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	320		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	1900		40	31	mg/L	1		2540 C-2020	Total/NA
Chloride	1100		10	1.3	mg/L	10		300.0	Total/NA
Fluoride	1.2		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	26		1.0	0.35	mg/L	1		300.0	Total/NA

Client Sample ID: DUP-001-F-20250911-01 — Lab Sample ID: 240-232994-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	350		100	57	ug/L	1		6010D	Total Recoverable
Barium	340		5.0	0.77	ug/L	1		6020B	Total Recoverable
Calcium	65000		1000	250	ug/L	1		6020B	Total Recoverable
Chromium	1.3	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	0.74	J B	1.0	0.086	ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: DUP-001-F-20250911-01 (Continued)

Lab Sample ID: 240-232994-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lithium	33		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	13000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	8.6		5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	3300		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	660000	^2	1000	880	ug/L	1		6020B	Total Recoverable
Total Alkalinity	320		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	320		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	2000		40	31	mg/L	1		2540 C-2020	Total/NA
Chloride	1000		10	1.3	mg/L	10		300.0	Total/NA
Fluoride	1.2		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	26		1.0	0.35	mg/L	1		300.0	Total/NA

Client Sample ID: 96157-F-20250911-01

Lab Sample ID: 240-232994-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	140		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	47		5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	540		5.0	0.77	ug/L	1		6020B	Total Recoverable
Calcium	70000		1000	250	ug/L	1		6020B	Total Recoverable
Chromium	2.3	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	0.49	J B	1.0	0.086	ug/L	1		6020B	Total Recoverable
Lithium	7.7	J	8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	14000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	5.8		5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	1900		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	320000	^2	1000	880	ug/L	1		6020B	Total Recoverable
Total Alkalinity	340		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	340		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	1000		20	16	mg/L	1		2540 C-2020	Total/NA
Chloride	430		10	1.3	mg/L	10		300.0	Total/NA
Fluoride	0.90		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	2.0		1.0	0.35	mg/L	1		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 2016-10-F-20250910-01
Date Collected: 09/10/25 11:33
Date Received: 09/13/25 13:00

Lab Sample ID: 240-232994-1
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**360**		100	57	ug/L		09/15/25 14:00	09/18/25 03:27	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		09/15/25 14:00	09/16/25 19:26	1
Arsenic	**3.3**	**J**	5.0	0.75	ug/L		09/15/25 14:00	09/16/25 19:26	1
Barium	**1500**		5.0	0.77	ug/L		09/15/25 14:00	09/16/25 19:26	1
Beryllium	ND		1.0	0.27	ug/L		09/15/25 14:00	09/16/25 19:26	1
Cadmium	ND		1.0	0.077	ug/L		09/15/25 14:00	09/16/25 19:26	1
Calcium	**760000**		1000	250	ug/L		09/15/25 14:00	09/16/25 19:26	1
Chromium	ND		5.0	1.2	ug/L		09/15/25 14:00	09/16/25 19:26	1
Cobalt	**0.39**	**J B**	1.0	0.086	ug/L		09/15/25 14:00	09/16/25 19:26	1
Lead	ND		1.0	0.45	ug/L		09/15/25 14:00	09/16/25 19:26	1
Lithium	**350**		8.0	3.4	ug/L		09/15/25 14:00	09/16/25 19:26	1
Magnesium	**270000**		1000	61	ug/L		09/15/25 14:00	09/16/25 19:26	1
Molybdenum	**17**		5.0	1.1	ug/L		09/15/25 14:00	09/16/25 19:26	1
Potassium	**64000**		1000	220	ug/L		09/15/25 14:00	09/16/25 19:26	1
Selenium	ND		5.0	0.89	ug/L		09/15/25 14:00	09/16/25 19:26	1
Sodium	**8600000**		10000	8800	ug/L		09/15/25 14:00	09/17/25 11:14	10
Thallium	ND		1.0	0.51	ug/L		09/15/25 14:00	09/16/25 19:26	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		09/15/25 14:00	09/16/25 19:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	**29**		5.0	2.6	mg/L			09/15/25 20:35	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**29**		5.0	2.6	mg/L			09/15/25 20:35	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			09/15/25 20:35	1
Total Dissolved Solids (SM 2540 C-2020)	**27000**		1000	780	mg/L			09/15/25 09:56	1
Chloride (EPA 300.0)	**20000**		100	13	mg/L			09/16/25 09:16	100
Fluoride (EPA 300.0)	ND		5.0	2.4	mg/L			09/16/25 09:16	100
Sulfate (EPA 300.0)	**99**	**J**	100	35	mg/L			09/16/25 09:16	100

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**3.99**		0.580	0.682	1.00	0.322	pCi/L	09/19/25 07:53	10/13/25 19:34	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*99.0*		*30 - 110*	*09/19/25 07:53*	*10/13/25 19:34*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**23.0**		1.78	2.77	1.00	0.823	pCi/L	09/19/25 08:00	10/13/25 15:52	1

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-232994-1

Client Sample ID: 2016-10-F-20250910-01
Date Collected: 09/10/25 11:33
Date Received: 09/13/25 13:00

Lab Sample ID: 240-232994-1
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*99.0*		*30 - 110*	*09/19/25 08:00*	*10/13/25 15:52*	*1*
Y Carrier	*78.9*		*30 - 110*	*09/19/25 08:00*	*10/13/25 15:52*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**27.0**		1.87	2.85	5.00	0.823	pCi/L		10/15/25 10:40	1

Client Sample ID: 2016-06-F-20250910-01
Date Collected: 09/10/25 14:37
Date Received: 09/13/25 13:00

Lab Sample ID: 240-232994-2
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	480		100	57	ug/L		09/15/25 14:00	09/18/25 02:25	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		09/15/25 14:00	09/16/25 18:23	1
Arsenic	1.4	J	5.0	0.75	ug/L		09/15/25 14:00	09/16/25 18:23	1
Barium	61		5.0	0.77	ug/L		09/15/25 14:00	09/16/25 18:23	1
Beryllium	ND		1.0	0.27	ug/L		09/15/25 14:00	09/16/25 18:23	1
Cadmium	ND		1.0	0.077	ug/L		09/15/25 14:00	09/16/25 18:23	1
Calcium	5000		1000	250	ug/L		09/15/25 14:00	09/16/25 18:23	1
Chromium	3.6	J	5.0	1.2	ug/L		09/15/25 14:00	09/16/25 18:23	1
Cobalt	0.44	J B	1.0	0.086	ug/L		09/15/25 14:00	09/16/25 18:23	1
Lead	0.65	J	1.0	0.45	ug/L		09/15/25 14:00	09/16/25 18:23	1
Lithium	21		8.0	3.4	ug/L		09/15/25 14:00	09/16/25 18:23	1
Magnesium	1400		1000	61	ug/L		09/15/25 14:00	09/16/25 18:23	1
Molybdenum	56		5.0	1.1	ug/L		09/15/25 14:00	09/16/25 18:23	1
Potassium	2300		1000	220	ug/L		09/15/25 14:00	09/16/25 18:23	1
Selenium	ND		5.0	0.89	ug/L		09/15/25 14:00	09/16/25 18:23	1
Sodium	660000		1000	880	ug/L		09/15/25 14:00	09/16/25 18:23	1
Thallium	ND		1.0	0.51	ug/L		09/15/25 14:00	09/16/25 18:23	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		09/15/25 14:00	09/16/25 18:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	470		5.0	2.6	mg/L			09/15/25 19:47	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	440		5.0	2.6	mg/L			09/15/25 19:47	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	33		5.0	2.6	mg/L			09/15/25 19:47	1
Total Dissolved Solids (SM 2540 C-2020)	1600		20	16	mg/L			09/15/25 09:56	1
Chloride (EPA 300.0)	610		10	1.3	mg/L			09/16/25 10:00	10
Fluoride (EPA 300.0)	5.1		0.050	0.024	mg/L			09/16/25 09:33	1
Sulfate (EPA 300.0)	91		1.0	0.35	mg/L			09/16/25 09:33	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.34		0.465	0.480	1.00	0.473	pCi/L	09/19/25 07:53	10/13/25 19:34	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.7*		*30 - 110*	*09/19/25 07:53*	*10/13/25 19:34*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	2.80	G	0.990	1.02	1.00	1.19	pCi/L	09/19/25 08:00	10/13/25 15:52	1

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-232994-1

Client Sample ID: 2016-06-F-20250910-01
Date Collected: 09/10/25 14:37
Date Received: 09/13/25 13:00

Lab Sample ID: 240-232994-2
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.7*		*30 - 110*	*09/19/25 08:00*	*10/13/25 15:52*	*1*
Y Carrier	*79.6*		*30 - 110*	*09/19/25 08:00*	*10/13/25 15:52*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**4.14**		1.09	1.13	5.00	1.19	pCi/L		10/15/25 10:40	1

Client Sample ID: 2016-07-F-20250911-01
Date Collected: 09/11/25 11:03
Date Received: 09/13/25 13:00

Lab Sample ID: 240-232994-3
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	450		100	57	ug/L		09/15/25 14:00	09/18/25 03:32	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		09/15/25 14:00	09/16/25 19:29	1
Arsenic	2.4	J	5.0	0.75	ug/L		09/15/25 14:00	09/16/25 19:29	1
Barium	670		5.0	0.77	ug/L		09/15/25 14:00	09/16/25 19:29	1
Beryllium	ND		1.0	0.27	ug/L		09/15/25 14:00	09/16/25 19:29	1
Cadmium	ND		1.0	0.077	ug/L		09/15/25 14:00	09/16/25 19:29	1
Calcium	29000		1000	250	ug/L		09/15/25 14:00	09/16/25 19:29	1
Chromium	2.6	J	5.0	1.2	ug/L		09/15/25 14:00	09/16/25 19:29	1
Cobalt	0.56	J B	1.0	0.086	ug/L		09/15/25 14:00	09/16/25 19:29	1
Lead	0.90	J	1.0	0.45	ug/L		09/15/25 14:00	09/16/25 19:29	1
Lithium	50		8.0	3.4	ug/L		09/15/25 14:00	09/16/25 19:29	1
Magnesium	6000		1000	61	ug/L		09/15/25 14:00	09/16/25 19:29	1
Molybdenum	53		5.0	1.1	ug/L		09/15/25 14:00	09/16/25 19:29	1
Potassium	6100		1000	220	ug/L		09/15/25 14:00	09/16/25 19:29	1
Selenium	ND		5.0	0.89	ug/L		09/15/25 14:00	09/16/25 19:29	1
Sodium	1100000		10000	8800	ug/L		09/15/25 14:00	09/17/25 11:17	10
Thallium	ND		1.0	0.51	ug/L		09/15/25 14:00	09/16/25 19:29	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		09/15/25 14:00	09/16/25 19:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	400		5.0	2.6	mg/L			09/15/25 20:41	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	400		5.0	2.6	mg/L			09/15/25 20:41	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			09/15/25 20:41	1
Total Dissolved Solids (SM 2540 C-2020)	2600		50	39	mg/L			09/16/25 15:19	1
Chloride (EPA 300.0)	1400		20	2.6	mg/L			09/16/25 10:52	20
Fluoride (EPA 300.0)	2.7		0.25	0.12	mg/L			09/16/25 10:43	5
Sulfate (EPA 300.0)	22		5.0	1.7	mg/L			09/16/25 10:43	5

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.42		0.476	0.492	1.00	0.438	pCi/L	09/19/25 07:53	10/13/25 19:33	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*75.4*		*30 - 110*	*09/19/25 07:53*	*10/13/25 19:33*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	6.50	G	1.39	1.51	1.00	1.28	pCi/L	09/19/25 08:00	10/13/25 15:52	1

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-232994-1

Client Sample ID: 2016-07-F-20250911-01
Date Collected: 09/11/25 11:03
Date Received: 09/13/25 13:00

Lab Sample ID: 240-232994-3
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*75.4*		*30 - 110*	*09/19/25 08:00*	*10/13/25 15:52*	*1*
Y Carrier	*78.9*		*30 - 110*	*09/19/25 08:00*	*10/13/25 15:52*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**7.91**		1.47	1.59	5.00	1.28	pCi/L		10/15/25 10:40	1

Client Sample ID: 2022-06-F-20250911-01
Date Collected: 09/11/25 12:53
Date Received: 09/13/25 13:00

Lab Sample ID: 240-232994-4
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	110		100	57	ug/L		09/15/25 14:00	09/18/25 03:37	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		09/15/25 14:00	09/16/25 19:37	1
Arsenic	1.9	J	5.0	0.75	ug/L		09/15/25 14:00	09/16/25 19:37	1
Barium	340		5.0	0.77	ug/L		09/15/25 14:00	09/16/25 19:37	1
Beryllium	ND		1.0	0.27	ug/L		09/15/25 14:00	09/16/25 19:37	1
Cadmium	ND		1.0	0.077	ug/L		09/15/25 14:00	09/16/25 19:37	1
Calcium	57000		1000	250	ug/L		09/15/25 14:00	09/16/25 19:37	1
Chromium	ND		5.0	1.2	ug/L		09/15/25 14:00	09/16/25 19:37	1
Cobalt	1.2	B	1.0	0.086	ug/L		09/15/25 14:00	09/16/25 19:37	1
Lead	0.46	J	1.0	0.45	ug/L		09/15/25 14:00	09/16/25 19:37	1
Lithium	16		8.0	3.4	ug/L		09/15/25 14:00	09/16/25 19:37	1
Magnesium	12000		1000	61	ug/L		09/15/25 14:00	09/16/25 19:37	1
Molybdenum	7.9		5.0	1.1	ug/L		09/15/25 14:00	09/16/25 19:37	1
Potassium	1600		1000	220	ug/L		09/15/25 14:00	09/16/25 19:37	1
Selenium	ND		5.0	0.89	ug/L		09/15/25 14:00	09/16/25 19:37	1
Sodium	250000	^2	1000	880	ug/L		09/15/25 14:00	09/16/25 19:37	1
Thallium	ND		1.0	0.51	ug/L		09/15/25 14:00	09/16/25 19:37	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		09/15/25 14:00	09/16/25 19:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	530		5.0	2.6	mg/L			09/15/25 20:51	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	530		5.0	2.6	mg/L			09/15/25 20:51	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			09/15/25 20:51	1
Total Dissolved Solids (SM 2540 C-2020)	710		10	7.8	mg/L			09/16/25 15:18	1
Chloride (EPA 300.0)	75		1.0	0.13	mg/L			09/16/25 11:01	1
Fluoride (EPA 300.0)	1.0		0.050	0.024	mg/L			09/16/25 11:01	1
Sulfate (EPA 300.0)	14		1.0	0.35	mg/L			09/16/25 11:01	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.812		0.358	0.365	1.00	0.402	pCi/L	09/19/25 07:53	10/13/25 19:33	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.8*		*30 - 110*	*09/19/25 07:53*	*10/13/25 19:33*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.06	U G	0.743	0.749	1.00	1.12	pCi/L	09/19/25 08:00	10/13/25 15:52	1

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-232994-1

Client Sample ID: 2022-06-F-20250911-01
Date Collected: 09/11/25 12:53
Date Received: 09/13/25 13:00

Lab Sample ID: 240-232994-4
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.8*		*30 - 110*	*09/19/25 08:00*	*10/13/25 15:52*	*1*
Y Carrier	*81.5*		*30 - 110*	*09/19/25 08:00*	*10/13/25 15:52*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**1.87**		0.825	0.833	5.00	1.12	pCi/L		10/15/25 14:25	1

Client Sample ID: 96158-F-20250911-01
Date Collected: 09/11/25 13:47
Date Received: 09/13/25 13:00

Lab Sample ID: 240-232994-5
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**370**		100	57	ug/L		09/15/25 14:00	09/18/25 03:41	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		09/15/25 14:00	09/16/25 19:39	1
Arsenic	**0.80**	**J**	5.0	0.75	ug/L		09/15/25 14:00	09/16/25 19:39	1
Barium	**360**		5.0	0.77	ug/L		09/15/25 14:00	09/16/25 19:39	1
Beryllium	ND		1.0	0.27	ug/L		09/15/25 14:00	09/16/25 19:39	1
Cadmium	ND		1.0	0.077	ug/L		09/15/25 14:00	09/16/25 19:39	1
Calcium	**68000**		1000	250	ug/L		09/15/25 14:00	09/16/25 19:39	1
Chromium	ND		5.0	1.2	ug/L		09/15/25 14:00	09/16/25 19:39	1
Cobalt	**0.63**	**J B**	1.0	0.086	ug/L		09/15/25 14:00	09/16/25 19:39	1
Lead	ND		1.0	0.45	ug/L		09/15/25 14:00	09/16/25 19:39	1
Lithium	**34**		8.0	3.4	ug/L		09/15/25 14:00	09/16/25 19:39	1
Magnesium	**14000**		1000	61	ug/L		09/15/25 14:00	09/16/25 19:39	1
Molybdenum	**9.1**		5.0	1.1	ug/L		09/15/25 14:00	09/16/25 19:39	1
Potassium	**3400**		1000	220	ug/L		09/15/25 14:00	09/16/25 19:39	1
Selenium	ND		5.0	0.89	ug/L		09/15/25 14:00	09/16/25 19:39	1
Sodium	**700000**	**^2**	1000	880	ug/L		09/15/25 14:00	09/16/25 19:39	1
Thallium	ND		1.0	0.51	ug/L		09/15/25 14:00	09/16/25 19:39	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		09/15/25 14:00	09/16/25 19:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	**320**		5.0	2.6	mg/L			09/15/25 21:00	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**320**		5.0	2.6	mg/L			09/15/25 21:00	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			09/15/25 21:00	1
Total Dissolved Solids (SM 2540 C-2020)	**1900**		40	31	mg/L			09/16/25 15:18	1
Chloride (EPA 300.0)	**1100**		10	1.3	mg/L			09/16/25 11:26	10
Fluoride (EPA 300.0)	**1.2**		0.050	0.024	mg/L			09/16/25 11:18	1
Sulfate (EPA 300.0)	**26**		1.0	0.35	mg/L			09/16/25 11:18	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.651**		0.281	0.287	1.00	0.326	pCi/L	09/19/25 07:53	10/13/25 19:33	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.2*		*30 - 110*	*09/19/25 07:53*	*10/13/25 19:33*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.911	U	0.650	0.655	1.00	0.998	pCi/L	09/19/25 08:00	10/13/25 15:52	1

Client Sample ID: 96158-F-20250911-01
Date Collected: 09/11/25 13:47
Date Received: 09/13/25 13:00

Lab Sample ID: 240-232994-5
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.2*		*30 - 110*	*09/19/25 08:00*	*10/13/25 15:52*	*1*
Y Carrier	*78.1*		*30 - 110*	*09/19/25 08:00*	*10/13/25 15:52*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**1.56**		0.708	0.715	5.00	0.998	pCi/L		10/15/25 14:25	1

Client Sample ID: DUP-001-F-20250911-01

Date Collected: 09/11/25 00:00
Date Received: 09/13/25 13:00

Lab Sample ID: 240-232994-6

Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**350**		100	57	ug/L		09/15/25 14:00	09/18/25 03:55	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		09/15/25 14:00	09/16/25 19:42	1
Arsenic	ND		5.0	0.75	ug/L		09/15/25 14:00	09/16/25 19:42	1
Barium	**340**		5.0	0.77	ug/L		09/15/25 14:00	09/16/25 19:42	1
Beryllium	ND		1.0	0.27	ug/L		09/15/25 14:00	09/16/25 19:42	1
Cadmium	ND		1.0	0.077	ug/L		09/15/25 14:00	09/16/25 19:42	1
Calcium	**65000**		1000	250	ug/L		09/15/25 14:00	09/16/25 19:42	1
Chromium	**1.3**	**J**	5.0	1.2	ug/L		09/15/25 14:00	09/16/25 19:42	1
Cobalt	**0.74**	**J B**	1.0	0.086	ug/L		09/15/25 14:00	09/16/25 19:42	1
Lead	ND		1.0	0.45	ug/L		09/15/25 14:00	09/16/25 19:42	1
Lithium	**33**		8.0	3.4	ug/L		09/15/25 14:00	09/16/25 19:42	1
Magnesium	**13000**		1000	61	ug/L		09/15/25 14:00	09/16/25 19:42	1
Molybdenum	**8.6**		5.0	1.1	ug/L		09/15/25 14:00	09/16/25 19:42	1
Potassium	**3300**		1000	220	ug/L		09/15/25 14:00	09/16/25 19:42	1
Selenium	ND		5.0	0.89	ug/L		09/15/25 14:00	09/16/25 19:42	1
Sodium	**660000**	**^2**	1000	880	ug/L		09/15/25 14:00	09/16/25 19:42	1
Thallium	ND		1.0	0.51	ug/L		09/15/25 14:00	09/16/25 19:42	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		09/15/25 14:00	09/16/25 19:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	**320**		5.0	2.6	mg/L			09/15/25 21:08	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**320**		5.0	2.6	mg/L			09/15/25 21:08	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			09/15/25 21:08	1
Total Dissolved Solids (SM 2540 C-2020)	**2000**		40	31	mg/L			09/16/25 15:18	1
Chloride (EPA 300.0)	**1000**		10	1.3	mg/L			09/16/25 11:44	10
Fluoride (EPA 300.0)	**1.2**		0.050	0.024	mg/L			09/16/25 11:35	1
Sulfate (EPA 300.0)	**26**		1.0	0.35	mg/L			09/16/25 11:35	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.724**		0.299	0.306	1.00	0.337	pCi/L	09/19/25 07:53	10/13/25 19:34	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.1*		*30 - 110*	*09/19/25 07:53*	*10/13/25 19:34*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.954**		0.629	0.636	1.00	0.946	pCi/L	09/19/25 08:00	10/13/25 15:52	1

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-232994-1

Client Sample ID: DUP-001-F-20250911-01
Date Collected: 09/11/25 00:00
Date Received: 09/13/25 13:00

Lab Sample ID: 240-232994-6
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.1*		*30 - 110*	*09/19/25 08:00*	*10/13/25 15:52*	*1*
Y Carrier	*78.9*		*30 - 110*	*09/19/25 08:00*	*10/13/25 15:52*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**1.68**		0.696	0.706	5.00	0.946	pCi/L		10/15/25 14:25	1

Client Sample ID: 96157-F-20250911-01

Date Collected: 09/11/25 14:36
Date Received: 09/13/25 13:00

Lab Sample ID: 240-232994-7

Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**140**		100	57	ug/L		09/15/25 14:00	09/18/25 03:59	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		09/15/25 14:00	09/16/25 19:45	1
Arsenic	**47**		5.0	0.75	ug/L		09/15/25 14:00	09/16/25 19:45	1
Barium	**540**		5.0	0.77	ug/L		09/15/25 14:00	09/16/25 19:45	1
Beryllium	ND		1.0	0.27	ug/L		09/15/25 14:00	09/16/25 19:45	1
Cadmium	ND		1.0	0.077	ug/L		09/15/25 14:00	09/16/25 19:45	1
Calcium	**70000**		1000	250	ug/L		09/15/25 14:00	09/16/25 19:45	1
Chromium	**2.3**	**J**	5.0	1.2	ug/L		09/15/25 14:00	09/16/25 19:45	1
Cobalt	**0.49**	**J B**	1.0	0.086	ug/L		09/15/25 14:00	09/16/25 19:45	1
Lead	ND		1.0	0.45	ug/L		09/15/25 14:00	09/16/25 19:45	1
Lithium	**7.7**	**J**	8.0	3.4	ug/L		09/15/25 14:00	09/16/25 19:45	1
Magnesium	**14000**		1000	61	ug/L		09/15/25 14:00	09/16/25 19:45	1
Molybdenum	**5.8**		5.0	1.1	ug/L		09/15/25 14:00	09/16/25 19:45	1
Potassium	**1900**		1000	220	ug/L		09/15/25 14:00	09/16/25 19:45	1
Selenium	ND		5.0	0.89	ug/L		09/15/25 14:00	09/16/25 19:45	1
Sodium	**320000**	**^2**	1000	880	ug/L		09/15/25 14:00	09/16/25 19:45	1
Thallium	ND		1.0	0.51	ug/L		09/15/25 14:00	09/16/25 19:45	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		09/15/25 14:00	09/16/25 19:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	**340**		5.0	2.6	mg/L			09/15/25 21:16	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**340**		5.0	2.6	mg/L			09/15/25 21:16	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			09/15/25 21:16	1
Total Dissolved Solids (SM 2540 C-2020)	**1000**		20	16	mg/L			09/16/25 15:18	1
Chloride (EPA 300.0)	**430**		10	1.3	mg/L			09/16/25 12:19	10
Fluoride (EPA 300.0)	**0.90**		0.050	0.024	mg/L			09/16/25 11:52	1
Sulfate (EPA 300.0)	**2.0**		1.0	0.35	mg/L			09/16/25 11:52	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.406**		0.268	0.271	1.00	0.357	pCi/L	09/22/25 08:07	10/14/25 22:15	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.9*		*30 - 110*	*09/22/25 08:07*	*10/14/25 22:15*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.699	U	0.477	0.481	1.00	0.714	pCi/L	09/22/25 08:13	10/14/25 11:52	1

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-232994-1

Client Sample ID: 96157-F-20250911-01
Date Collected: 09/11/25 14:36
Date Received: 09/13/25 13:00

Lab Sample ID: 240-232994-7
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.9*		*30 - 110*	*09/22/25 08:13*	*10/14/25 11:52*	*1*
Y Carrier	*78.1*		*30 - 110*	*09/22/25 08:13*	*10/14/25 11:52*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**1.10**		0.547	0.552	5.00	0.714	pCi/L		10/15/25 14:25	1

Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-232994-1

Method: 9315 - Radium 226 by GFPC

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)						
		Ba						
Lab Sample ID	Client Sample ID	(30-110)						
240-232994-1	2016-10-F-20250910-01	99.0						
240-232994-2	2016-06-F-20250910-01	81.7						
240-232994-2 MS	2016-06-F-20250910-01	79.2						
240-232994-2 MSD	2016-06-F-20250910-01	83.5						
240-232994-3	2016-07-F-20250911-01	75.4						
240-232994-4	2022-06-F-20250911-01	88.8						
240-232994-5	96158-F-20250911-01	94.2						
240-232994-6	DUP-001-F-20250911-01	90.1						
240-232994-7	96157-F-20250911-01	92.9						
LCS 160-736722/2-A	Lab Control Sample	84.0						
LCS 160-737002/2-A	Lab Control Sample	92.6						
MB 160-736722/1-A	Method Blank	88.6						
MB 160-737002/1-A	Method Blank	92.4						

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	(30-110)	(30-110)					
240-232994-1	2016-10-F-20250910-01	99.0	78.9					
240-232994-2	2016-06-F-20250910-01	81.7	79.6					
240-232994-2 MS	2016-06-F-20250910-01	79.2	80.0					
240-232994-2 MSD	2016-06-F-20250910-01	83.5	81.1					
240-232994-3	2016-07-F-20250911-01	75.4	78.9					
240-232994-4	2022-06-F-20250911-01	88.8	81.5					
240-232994-5	96158-F-20250911-01	94.2	78.1					
240-232994-6	DUP-001-F-20250911-01	90.1	78.9					
240-232994-7	96157-F-20250911-01	92.9	78.1					
LCS 160-736723/2-A	Lab Control Sample	84.0	83.0					
LCS 160-737003/2-A	Lab Control Sample	92.6	80.4					
MB 160-736723/1-A	Method Blank	88.6	80.4					
MB 160-737003/1-A	Method Blank	92.4	80.4					

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-671711/1-A
Matrix: Water
Analysis Batch: 672194

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 671711

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		09/15/25 14:00	09/18/25 02:16	1

Lab Sample ID: LCS 240-671711/2-A
Matrix: Water
Analysis Batch: 672194

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 671711

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1000	950		ug/L		95	80 - 120

Lab Sample ID: 240-232994-2 MS
Matrix: Water
Analysis Batch: 672194

Client Sample ID: 2016-06-F-20250910-01
Prep Type: Total Recoverable
Prep Batch: 671711

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	480		1000	1470		ug/L		98	75 - 125

Lab Sample ID: 240-232994-2 MSD
Matrix: Water
Analysis Batch: 672194

Client Sample ID: 2016-06-F-20250910-01
Prep Type: Total Recoverable
Prep Batch: 671711

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	480		1000	1430		ug/L		95	75 - 125	2	20

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-671711/1-A
Matrix: Water
Analysis Batch: 671935

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 671711

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		09/15/25 14:00	09/16/25 11:55	1
Arsenic	ND		5.0	0.75	ug/L		09/15/25 14:00	09/16/25 11:55	1
Barium	ND		5.0	0.77	ug/L		09/15/25 14:00	09/16/25 11:55	1
Beryllium	ND		1.0	0.27	ug/L		09/15/25 14:00	09/16/25 11:55	1
Cadmium	ND		1.0	0.077	ug/L		09/15/25 14:00	09/16/25 11:55	1
Calcium	ND		1000	250	ug/L		09/15/25 14:00	09/16/25 11:55	1
Chromium	ND		5.0	1.2	ug/L		09/15/25 14:00	09/16/25 11:55	1
Cobalt	0.136	J	1.0	0.086	ug/L		09/15/25 14:00	09/16/25 11:55	1
Lead	ND		1.0	0.45	ug/L		09/15/25 14:00	09/16/25 11:55	1
Lithium	ND		8.0	3.4	ug/L		09/15/25 14:00	09/16/25 11:55	1
Magnesium	ND		1000	61	ug/L		09/15/25 14:00	09/16/25 11:55	1
Molybdenum	ND		5.0	1.1	ug/L		09/15/25 14:00	09/16/25 11:55	1
Potassium	ND		1000	220	ug/L		09/15/25 14:00	09/16/25 11:55	1
Selenium	ND		5.0	0.89	ug/L		09/15/25 14:00	09/16/25 11:55	1
Sodium	ND		1000	880	ug/L		09/15/25 14:00	09/16/25 11:55	1
Thallium	ND		1.0	0.51	ug/L		09/15/25 14:00	09/16/25 11:55	1

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

Lab Sample ID: LCS 240-671711/3-A
Matrix: Water
Analysis Batch: 671935

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 671711

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Antimony			100	96.6		ug/L		97	80 - 120		
Arsenic			1000	965		ug/L		97	80 - 120		
Barium			1000	955		ug/L		95	80 - 120		
Beryllium			500	469		ug/L		94	80 - 120		
Cadmium			500	462		ug/L		92	80 - 120		
Calcium			25000	24100		ug/L		96	80 - 120		
Chromium			500	471		ug/L		94	80 - 120		
Cobalt			500	466		ug/L		93	80 - 120		
Lead			500	508		ug/L		102	80 - 120		
Lithium			500	482		ug/L		96	80 - 120		
Magnesium			25000	23900		ug/L		96	80 - 120		
Molybdenum			500	474		ug/L		95	80 - 120		
Potassium			25000	24200		ug/L		97	80 - 120		
Selenium			1000	931		ug/L		93	80 - 120		
Sodium			25000	23700		ug/L		95	80 - 120		
Thallium			1000	1090		ug/L		109	80 - 120		

Lab Sample ID: 240-232994-2 MS
Matrix: Water
Analysis Batch: 671935

Client Sample ID: 2016-06-F-20250910-01
Prep Type: Total Recoverable
Prep Batch: 671711

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Antimony	ND		100	99.5		ug/L		99	80 - 120		
Arsenic	1.4	J	1000	1010		ug/L		101	80 - 120		
Barium	61		1000	1030		ug/L		97	80 - 120		
Beryllium	ND		500	479		ug/L		96	80 - 120		
Cadmium	ND		500	459		ug/L		92	80 - 120		
Calcium	5000		25000	29300		ug/L		97	80 - 120		
Chromium	3.6	J	500	483		ug/L		96	80 - 120		
Cobalt	0.44	J B	500	493		ug/L		98	80 - 120		
Lead	0.65	J	500	512		ug/L		102	80 - 120		
Lithium	21		500	520		ug/L		100	80 - 120		
Magnesium	1400		25000	25400		ug/L		96	80 - 120		
Molybdenum	56		500	552		ug/L		99	80 - 120		
Potassium	2300		25000	27100		ug/L		99	80 - 120		
Selenium	ND		1000	951		ug/L		95	80 - 120		
Sodium	660000		25000	657000	4	ug/L		2	80 - 120		
Thallium	ND		1000	1090		ug/L		109	80 - 120		

Lab Sample ID: 240-232994-2 MSD
Matrix: Water
Analysis Batch: 671935

Client Sample ID: 2016-06-F-20250910-01
Prep Type: Total Recoverable
Prep Batch: 671711

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	ND		100	97.1		ug/L		97	80 - 120	2	20
Arsenic	1.4	J	1000	985		ug/L		98	80 - 120	3	20
Barium	61		1000	1010		ug/L		95	80 - 120	2	20
Beryllium	ND		500	473		ug/L		95	80 - 120	1	20
Cadmium	ND		500	449		ug/L		90	80 - 120	2	20

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

Lab Sample ID: 240-232994-2 MSD
Matrix: Water
Analysis Batch: 671935

Client Sample ID: 2016-06-F-20250910-01
Prep Type: Total Recoverable
Prep Batch: 671711

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	5000		25000	29000		ug/L		96	80 - 120	1	20
Chromium	3.6	J	500	468		ug/L		93	80 - 120	3	20
Cobalt	0.44	J B	500	472		ug/L		94	80 - 120	4	20
Lead	0.65	J	500	492		ug/L		98	80 - 120	4	20
Lithium	21		500	501		ug/L		96	80 - 120	4	20
Magnesium	1400		25000	25000		ug/L		94	80 - 120	1	20
Molybdenum	56		500	543		ug/L		97	80 - 120	2	20
Potassium	2300		25000	26600		ug/L		97	80 - 120	2	20
Selenium	ND		1000	910		ug/L		91	80 - 120	4	20
Sodium	660000		25000	664000	4	ug/L		32	80 - 120	1	20
Thallium	ND		1000	1050		ug/L		105	80 - 120	4	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-671720/1-A
Matrix: Water
Analysis Batch: 672010

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 671720

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		09/15/25 14:00	09/16/25 18:33	1

Lab Sample ID: LCS 240-671720/2-A
Matrix: Water
Analysis Batch: 672010

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 671720

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	4.81		ug/L		96	80 - 120

Lab Sample ID: 240-232994-2 MS
Matrix: Water
Analysis Batch: 672010

Client Sample ID: 2016-06-F-20250910-01
Prep Type: Total/NA
Prep Batch: 671720

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		1.00	0.958		ug/L		96	80 - 120

Lab Sample ID: 240-232994-2 MSD
Matrix: Water
Analysis Batch: 672010

Client Sample ID: 2016-06-F-20250910-01
Prep Type: Total/NA
Prep Batch: 671720

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		1.00	0.969		ug/L		97	80 - 120	1	20

Method: 2320 B-2021 - Alkalinity

Lab Sample ID: MB 240-671881/59
Matrix: Water
Analysis Batch: 671881

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	ND		5.0	2.6	mg/L			09/15/25 17:38	1

Method: 2320 B-2021 - Alkalinity (Continued)

Lab Sample ID: MB 240-671881/59
Matrix: Water
Analysis Batch: 671881

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			09/15/25 17:38	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			09/15/25 17:38	1

Lab Sample ID: MB 240-671881/85
Matrix: Water
Analysis Batch: 671881

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	ND		5.0	2.6	mg/L			09/15/25 20:19	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			09/15/25 20:19	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			09/15/25 20:19	1

Lab Sample ID: LCS 240-671881/84
Matrix: Water
Analysis Batch: 671881

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Alkalinity			280	258		mg/L		92	86 - 123		

Lab Sample ID: 240-232994-2 DU
Matrix: Water
Analysis Batch: 671881

Client Sample ID: 2016-06-F-20250910-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Alkalinity	470			474		mg/L				0.2	20
Bicarbonate Alkalinity as CaCO3	440			439		mg/L				0.1	20
Carbonate Alkalinity as CaCO3	33			34.3		mg/L				5	20

Method: 2540 C-2020 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 240-671680/1
Matrix: Water
Analysis Batch: 671680

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	ND		10	7.8	mg/L			09/15/25 09:56	1

Lab Sample ID: LCS 240-671680/2
Matrix: Water
Analysis Batch: 671680

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			176	169		mg/L		96	80 - 120		

Lab Sample ID: 240-232994-2 DU
Matrix: Water
Analysis Batch: 671680

Client Sample ID: 2016-06-F-20250910-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	1600			1560		mg/L				3	20

Method: 2540 C-2020 - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: MB 240-671967/1
Matrix: Water
Analysis Batch: 671967

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	ND		10	7.8	mg/L			09/16/25 15:18	1

Lab Sample ID: LCS 240-671967/2
Matrix: Water
Analysis Batch: 671967

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	176	167		mg/L		95	80 - 120

Lab Sample ID: 240-232994-4 DU
Matrix: Water
Analysis Batch: 671967

Client Sample ID: 2022-06-F-20250911-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	710		726		mg/L		3	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-671806/3
Matrix: Water
Analysis Batch: 671806

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.13	mg/L			09/16/25 07:06	1
Fluoride	ND		0.050	0.024	mg/L			09/16/25 07:06	1
Sulfate	ND		1.0	0.35	mg/L			09/16/25 07:06	1

Lab Sample ID: LCS 240-671806/4
Matrix: Water
Analysis Batch: 671806

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	49.1		mg/L		98	90 - 110
Fluoride	2.50	2.51		mg/L		101	90 - 110
Sulfate	50.0	48.3		mg/L		97	90 - 110

Lab Sample ID: 240-232994-2 MS
Matrix: Water
Analysis Batch: 671806

Client Sample ID: 2016-06-F-20250910-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	5.1		2.50	7.28		mg/L		87	80 - 120
Sulfate	91		50.0	136		mg/L		91	80 - 120

Lab Sample ID: 240-232994-2 MS
Matrix: Water
Analysis Batch: 671806

Client Sample ID: 2016-06-F-20250910-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	610		500	1080		mg/L		95	80 - 120

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 240-232994-2 MSD
Matrix: Water
Analysis Batch: 671806

Client Sample ID: 2016-06-F-20250910-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluoride	5.1		2.50	7.36		mg/L		90	80 - 120	1	15
Sulfate	91		50.0	138		mg/L		94	80 - 120	1	15

Method: 300.0 - Anions, Ion Chromatography - DL2

Lab Sample ID: 240-232994-2 MSD
Matrix: Water
Analysis Batch: 671806

Client Sample ID: 2016-06-F-20250910-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride - DL2	610		500	1090		mg/L		96	80 - 120	1	15

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-736722/1-A
Matrix: Water
Analysis Batch: 740415

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 736722

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.006637	U	0.185	0.185	1.00	0.369	pCi/L	09/19/25 07:53	10/13/25 19:33	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.6*		*30 - 110*	*09/19/25 07:53*	*10/13/25 19:33*	*1*

Lab Sample ID: LCS 160-736722/2-A
Matrix: Water
Analysis Batch: 740415

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 736722

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-226			9.57	7.955		1.14	1.00	0.427	pCi/L	83	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*84.0*		*30 - 110*

Lab Sample ID: 240-232994-2 MS
Matrix: Water
Analysis Batch: 740416

Client Sample ID: 2016-06-F-20250910-01
Prep Type: Total/NA
Prep Batch: 736722

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-226	1.34		12.7	12.17		1.68	1.00	0.600	pCi/L	85	60 - 140		

Carrier	*MS %Yield*	*MS Qualifier*	*Limits*
Ba Carrier	*79.2*		*30 - 110*

Method: 9315 - Radium 226 by GFPC (Continued)

Lab Sample ID: 240-232994-2 MSD
Matrix: Water
Analysis Batch: 740416

Client Sample ID: 2016-06-F-20250910-01
Prep Type: Total/NA
Prep Batch: 736722

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	1.34		12.6	12.29		1.66	1.00	0.494	pCi/L	87	60 - 140	0.04	1

Carrier	*MSD %Yield*	*MSD Qualifier*	*Limits*
Ba Carrier	*83.5*		*30 - 110*

Lab Sample ID: MB 160-737002/1-A
Matrix: Water
Analysis Batch: 740598

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 737002

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.3130		0.207	0.209	1.00	0.281	pCi/L	09/22/25 08:07	10/14/25 22:12	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.4*		*30 - 110*	*09/22/25 08:07*	*10/14/25 22:12*	*1*

Lab Sample ID: LCS 160-737002/2-A
Matrix: Water
Analysis Batch: 740598

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 737002

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-226			9.57	9.882		1.27	1.00	0.387	pCi/L	103	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*92.6*		*30 - 110*

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-736723/1-A
Matrix: Water
Analysis Batch: 740415

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 736723

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.5366	U	0.590	0.593	1.00	0.965	pCi/L	09/19/25 08:00	10/13/25 15:51	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.6*		*30 - 110*	*09/19/25 08:00*	*10/13/25 15:51*	*1*
Y Carrier	*80.4*		*30 - 110*	*09/19/25 08:00*	*10/13/25 15:51*	*1*

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

Lab Sample ID: LCS 160-736723/2-A
Matrix: Water
Analysis Batch: 740416

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 736723

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228			8.98	8.381		1.21	1.00	0.598	pCi/L	93	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*84.0*		*30 - 110*
Y Carrier	*83.0*		*30 - 110*

Lab Sample ID: 240-232994-2 MS
Matrix: Water
Analysis Batch: 740407

Client Sample ID: 2016-06-F-20250910-01
Prep Type: Total/NA
Prep Batch: 736723

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228	2.80	G	11.9	13.17		1.92	1.00	0.942	pCi/L	100	60 - 140		

Carrier	*MS %Yield*	*MS Qualifier*	*Limits*
Ba Carrier	*79.2*		*30 - 110*
Y Carrier	*80.0*		*30 - 110*

Lab Sample ID: 240-232994-2 MSD
Matrix: Water
Analysis Batch: 740407

Client Sample ID: 2016-06-F-20250910-01
Prep Type: Total/NA
Prep Batch: 736723

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	2.80	G	11.9	14.39		2.02	1.00	0.983	pCi/L	110	60 - 140	0.31	1

Carrier	*MSD %Yield*	*MSD Qualifier*	*Limits*
Ba Carrier	*83.5*		*30 - 110*
Y Carrier	*81.1*		*30 - 110*

Lab Sample ID: MB 160-737003/1-A
Matrix: Water
Analysis Batch: 740611

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 737003

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.6671		0.390	0.395	1.00	0.571	pCi/L	09/22/25 08:13	10/14/25 11:51	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.4*		*30 - 110*	*09/22/25 08:13*	*10/14/25 11:51*	*1*
Y Carrier	*80.4*		*30 - 110*	*09/22/25 08:13*	*10/14/25 11:51*	*1*

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

Lab Sample ID: LCS 160-737003/2-A
Matrix: Water
Analysis Batch: 740611

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 737003

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228			8.01	7.243		1.08	1.00	0.558	pCi/L	90	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*92.6*		*30 - 110*
Y Carrier	*80.4*		*30 - 110*

Metals

Prep Batch: 671711

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-232994-1	2016-10-F-20250910-01	Total Recoverable	Water	3005A	
240-232994-2	2016-06-F-20250910-01	Total Recoverable	Water	3005A	
240-232994-3	2016-07-F-20250911-01	Total Recoverable	Water	3005A	
240-232994-4	2022-06-F-20250911-01	Total Recoverable	Water	3005A	
240-232994-5	96158-F-20250911-01	Total Recoverable	Water	3005A	
240-232994-6	DUP-001-F-20250911-01	Total Recoverable	Water	3005A	
240-232994-7	96157-F-20250911-01	Total Recoverable	Water	3005A	
MB 240-671711/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-671711/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-671711/3-A	Lab Control Sample	Total Recoverable	Water	3005A	
240-232994-2 MS	2016-06-F-20250910-01	Total Recoverable	Water	3005A	
240-232994-2 MS	2016-06-F-20250910-01	Total Recoverable	Water	3005A	
240-232994-2 MSD	2016-06-F-20250910-01	Total Recoverable	Water	3005A	
240-232994-2 MSD	2016-06-F-20250910-01	Total Recoverable	Water	3005A	

Prep Batch: 671720

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-232994-1	2016-10-F-20250910-01	Total/NA	Water	7470A	
240-232994-2	2016-06-F-20250910-01	Total/NA	Water	7470A	
240-232994-3	2016-07-F-20250911-01	Total/NA	Water	7470A	
240-232994-4	2022-06-F-20250911-01	Total/NA	Water	7470A	
240-232994-5	96158-F-20250911-01	Total/NA	Water	7470A	
240-232994-6	DUP-001-F-20250911-01	Total/NA	Water	7470A	
240-232994-7	96157-F-20250911-01	Total/NA	Water	7470A	
MB 240-671720/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-671720/2-A	Lab Control Sample	Total/NA	Water	7470A	
240-232994-2 MS	2016-06-F-20250910-01	Total/NA	Water	7470A	
240-232994-2 MSD	2016-06-F-20250910-01	Total/NA	Water	7470A	

Analysis Batch: 671935

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-232994-1	2016-10-F-20250910-01	Total Recoverable	Water	6020B	671711
240-232994-2	2016-06-F-20250910-01	Total Recoverable	Water	6020B	671711
240-232994-3	2016-07-F-20250911-01	Total Recoverable	Water	6020B	671711
240-232994-4	2022-06-F-20250911-01	Total Recoverable	Water	6020B	671711
240-232994-5	96158-F-20250911-01	Total Recoverable	Water	6020B	671711
240-232994-6	DUP-001-F-20250911-01	Total Recoverable	Water	6020B	671711
240-232994-7	96157-F-20250911-01	Total Recoverable	Water	6020B	671711
MB 240-671711/1-A	Method Blank	Total Recoverable	Water	6020B	671711
LCS 240-671711/3-A	Lab Control Sample	Total Recoverable	Water	6020B	671711
240-232994-2 MS	2016-06-F-20250910-01	Total Recoverable	Water	6020B	671711
240-232994-2 MSD	2016-06-F-20250910-01	Total Recoverable	Water	6020B	671711

Analysis Batch: 672010

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-232994-1	2016-10-F-20250910-01	Total/NA	Water	7470A	671720
240-232994-2	2016-06-F-20250910-01	Total/NA	Water	7470A	671720
240-232994-3	2016-07-F-20250911-01	Total/NA	Water	7470A	671720
240-232994-4	2022-06-F-20250911-01	Total/NA	Water	7470A	671720
240-232994-5	96158-F-20250911-01	Total/NA	Water	7470A	671720
240-232994-6	DUP-001-F-20250911-01	Total/NA	Water	7470A	671720

Metals (Continued)

Analysis Batch: 672010 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-232994-7	96157-F-20250911-01	Total/NA	Water	7470A	671720
MB 240-671720/1-A	Method Blank	Total/NA	Water	7470A	671720
LCS 240-671720/2-A	Lab Control Sample	Total/NA	Water	7470A	671720
240-232994-2 MS	2016-06-F-20250910-01	Total/NA	Water	7470A	671720
240-232994-2 MSD	2016-06-F-20250910-01	Total/NA	Water	7470A	671720

Analysis Batch: 672079

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-232994-1	2016-10-F-20250910-01	Total Recoverable	Water	6020B	671711
240-232994-3	2016-07-F-20250911-01	Total Recoverable	Water	6020B	671711

Analysis Batch: 672194

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-232994-1	2016-10-F-20250910-01	Total Recoverable	Water	6010D	671711
240-232994-2	2016-06-F-20250910-01	Total Recoverable	Water	6010D	671711
240-232994-3	2016-07-F-20250911-01	Total Recoverable	Water	6010D	671711
240-232994-4	2022-06-F-20250911-01	Total Recoverable	Water	6010D	671711
240-232994-5	96158-F-20250911-01	Total Recoverable	Water	6010D	671711
240-232994-6	DUP-001-F-20250911-01	Total Recoverable	Water	6010D	671711
240-232994-7	96157-F-20250911-01	Total Recoverable	Water	6010D	671711
MB 240-671711/1-A	Method Blank	Total Recoverable	Water	6010D	671711
LCS 240-671711/2-A	Lab Control Sample	Total Recoverable	Water	6010D	671711
240-232994-2 MS	2016-06-F-20250910-01	Total Recoverable	Water	6010D	671711
240-232994-2 MSD	2016-06-F-20250910-01	Total Recoverable	Water	6010D	671711

General Chemistry

Analysis Batch: 671680

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-232994-1	2016-10-F-20250910-01	Total/NA	Water	2540 C-2020	
240-232994-2	2016-06-F-20250910-01	Total/NA	Water	2540 C-2020	
MB 240-671680/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-671680/2	Lab Control Sample	Total/NA	Water	2540 C-2020	
240-232994-2 DU	2016-06-F-20250910-01	Total/NA	Water	2540 C-2020	

Analysis Batch: 671806

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-232994-1	2016-10-F-20250910-01	Total/NA	Water	300.0	
240-232994-2	2016-06-F-20250910-01	Total/NA	Water	300.0	
240-232994-2	2016-06-F-20250910-01	Total/NA	Water	300.0	
240-232994-3	2016-07-F-20250911-01	Total/NA	Water	300.0	
240-232994-3	2016-07-F-20250911-01	Total/NA	Water	300.0	
240-232994-4	2022-06-F-20250911-01	Total/NA	Water	300.0	
240-232994-5	96158-F-20250911-01	Total/NA	Water	300.0	
240-232994-5	96158-F-20250911-01	Total/NA	Water	300.0	
240-232994-6	DUP-001-F-20250911-01	Total/NA	Water	300.0	
240-232994-6	DUP-001-F-20250911-01	Total/NA	Water	300.0	
240-232994-7	96157-F-20250911-01	Total/NA	Water	300.0	
240-232994-7	96157-F-20250911-01	Total/NA	Water	300.0	
MB 240-671806/3	Method Blank	Total/NA	Water	300.0	
LCS 240-671806/4	Lab Control Sample	Total/NA	Water	300.0	

General Chemistry (Continued)

Analysis Batch: 671806 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-232994-2 MS	2016-06-F-20250910-01	Total/NA	Water	300.0	
240-232994-2 MS	2016-06-F-20250910-01	Total/NA	Water	300.0	
240-232994-2 MSD	2016-06-F-20250910-01	Total/NA	Water	300.0	
240-232994-2 MSD - DL2	2016-06-F-20250910-01	Total/NA	Water	300.0	

Analysis Batch: 671881

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-232994-1	2016-10-F-20250910-01	Total/NA	Water	2320 B-2021	
240-232994-2	2016-06-F-20250910-01	Total/NA	Water	2320 B-2021	
240-232994-3	2016-07-F-20250911-01	Total/NA	Water	2320 B-2021	
240-232994-4	2022-06-F-20250911-01	Total/NA	Water	2320 B-2021	
240-232994-5	96158-F-20250911-01	Total/NA	Water	2320 B-2021	
240-232994-6	DUP-001-F-20250911-01	Total/NA	Water	2320 B-2021	
240-232994-7	96157-F-20250911-01	Total/NA	Water	2320 B-2021	
MB 240-671881/59	Method Blank	Total/NA	Water	2320 B-2021	
MB 240-671881/85	Method Blank	Total/NA	Water	2320 B-2021	
LCS 240-671881/84	Lab Control Sample	Total/NA	Water	2320 B-2021	
240-232994-2 DU	2016-06-F-20250910-01	Total/NA	Water	2320 B-2021	

Analysis Batch: 671967

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-232994-3	2016-07-F-20250911-01	Total/NA	Water	2540 C-2020	
240-232994-4	2022-06-F-20250911-01	Total/NA	Water	2540 C-2020	
240-232994-5	96158-F-20250911-01	Total/NA	Water	2540 C-2020	
240-232994-6	DUP-001-F-20250911-01	Total/NA	Water	2540 C-2020	
240-232994-7	96157-F-20250911-01	Total/NA	Water	2540 C-2020	
MB 240-671967/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-671967/2	Lab Control Sample	Total/NA	Water	2540 C-2020	
240-232994-4 DU	2022-06-F-20250911-01	Total/NA	Water	2540 C-2020	

Rad

Prep Batch: 736722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-232994-1	2016-10-F-20250910-01	Total/NA	Water	PrecSep-21	
240-232994-2	2016-06-F-20250910-01	Total/NA	Water	PrecSep-21	
240-232994-3	2016-07-F-20250911-01	Total/NA	Water	PrecSep-21	
240-232994-4	2022-06-F-20250911-01	Total/NA	Water	PrecSep-21	
240-232994-5	96158-F-20250911-01	Total/NA	Water	PrecSep-21	
240-232994-6	DUP-001-F-20250911-01	Total/NA	Water	PrecSep-21	
MB 160-736722/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-736722/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
240-232994-2 MS	2016-06-F-20250910-01	Total/NA	Water	PrecSep-21	
240-232994-2 MSD	2016-06-F-20250910-01	Total/NA	Water	PrecSep-21	

Prep Batch: 736723

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-232994-1	2016-10-F-20250910-01	Total/NA	Water	PrecSep_0	
240-232994-2	2016-06-F-20250910-01	Total/NA	Water	PrecSep_0	
240-232994-3	2016-07-F-20250911-01	Total/NA	Water	PrecSep_0	
240-232994-4	2022-06-F-20250911-01	Total/NA	Water	PrecSep_0	

Rad (Continued)

Prep Batch: 736723 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-232994-5	96158-F-20250911-01	Total/NA	Water	PrecSep_0	
240-232994-6	DUP-001-F-20250911-01	Total/NA	Water	PrecSep_0	
MB 160-736723/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-736723/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
240-232994-2 MS	2016-06-F-20250910-01	Total/NA	Water	PrecSep_0	
240-232994-2 MSD	2016-06-F-20250910-01	Total/NA	Water	PrecSep_0	

Prep Batch: 737002

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-232994-7	96157-F-20250911-01	Total/NA	Water	PrecSep-21	
MB 160-737002/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-737002/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 737003

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-232994-7	96157-F-20250911-01	Total/NA	Water	PrecSep_0	
MB 160-737003/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-737003/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-232994-1
Project/Site: Federal CCR Wells

Client Sample ID: 2016-10-F-20250910-01
Lab Sample ID: 240-232994-1

Date Collected: 09/10/25 11:33
Matrix: Water
Date Received: 09/13/25 13:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			671711	F3PF	EET CLE	09/15/25 14:00
Total Recoverable	Analysis	6010D		1	672194	AJC	EET CLE	09/18/25 03:27
Total Recoverable	Prep	3005A			671711	F3PF	EET CLE	09/15/25 14:00
Total Recoverable	Analysis	6020B		1	671935	S4FJ	EET CLE	09/16/25 19:26
Total Recoverable	Prep	3005A			671711	F3PF	EET CLE	09/15/25 14:00
Total Recoverable	Analysis	6020B		10	672079	S4FJ	EET CLE	09/17/25 11:14
Total/NA	Prep	7470A			671720	F3PF	EET CLE	09/15/25 14:00
Total/NA	Analysis	7470A		1	672010	GEV	EET CLE	09/16/25 19:12
Total/NA	Analysis	2320 B-2021		1	671881	PQD2	EET CLE	09/15/25 20:35
Total/NA	Analysis	2540 C-2020		1	671680	C5SV	EET CLE	09/15/25 09:56
Total/NA	Analysis	300.0		100	671806	JMR	EET CLE	09/16/25 09:16
Total/NA	Prep	PrecSep-21			736722	JTR	EET SL	09/19/25 07:53
Total/NA	Analysis	9315		1	740416	SCB	EET SL	10/13/25 19:34
Total/NA	Prep	PrecSep_0			736723	JTR	EET SL	09/19/25 08:00
Total/NA	Analysis	9320		1	740415	SWS	EET SL	10/13/25 15:52
Total/NA	Analysis	Ra226_Ra228		1	740621	CAH	EET SL	10/15/25 10:40

Client Sample ID: 2016-06-F-20250910-01
Lab Sample ID: 240-232994-2

Date Collected: 09/10/25 14:37
Matrix: Water
Date Received: 09/13/25 13:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			671711	F3PF	EET CLE	09/15/25 14:00
Total Recoverable	Analysis	6010D		1	672194	AJC	EET CLE	09/18/25 02:25
Total Recoverable	Prep	3005A			671711	F3PF	EET CLE	09/15/25 14:00
Total Recoverable	Analysis	6020B		1	671935	S4FJ	EET CLE	09/16/25 18:23
Total/NA	Prep	7470A			671720	F3PF	EET CLE	09/15/25 14:00
Total/NA	Analysis	7470A		1	672010	GEV	EET CLE	09/16/25 18:36
Total/NA	Analysis	2320 B-2021		1	671881	PQD2	EET CLE	09/15/25 19:47
Total/NA	Analysis	2540 C-2020		1	671680	C5SV	EET CLE	09/15/25 09:56
Total/NA	Analysis	300.0		1	671806	JMR	EET CLE	09/16/25 09:33
Total/NA	Analysis	300.0		10	671806	JMR	EET CLE	09/16/25 10:00
Total/NA	Prep	PrecSep-21			736722	JTR	EET SL	09/19/25 07:53
Total/NA	Analysis	9315		1	740416	SCB	EET SL	10/13/25 19:34
Total/NA	Prep	PrecSep_0			736723	JTR	EET SL	09/19/25 08:00
Total/NA	Analysis	9320		1	740415	SWS	EET SL	10/13/25 15:52
Total/NA	Analysis	Ra226_Ra228		1	740621	CAH	EET SL	10/15/25 10:40

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-232994-1

Client Sample ID: 2016-07-F-20250911-01

Lab Sample ID: 240-232994-3

Date Collected: 09/11/25 11:03
Date Received: 09/13/25 13:00

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			671711	F3PF	EET CLE	09/15/25 14:00
Total Recoverable	Analysis	6010D		1	672194	AJC	EET CLE	09/18/25 03:32
Total Recoverable	Prep	3005A			671711	F3PF	EET CLE	09/15/25 14:00
Total Recoverable	Analysis	6020B		1	671935	S4FJ	EET CLE	09/16/25 19:29
Total Recoverable	Prep	3005A			671711	F3PF	EET CLE	09/15/25 14:00
Total Recoverable	Analysis	6020B		10	672079	S4FJ	EET CLE	09/17/25 11:17
Total/NA	Prep	7470A			671720	F3PF	EET CLE	09/15/25 14:00
Total/NA	Analysis	7470A		1	672010	GEV	EET CLE	09/16/25 19:14
Total/NA	Analysis	2320 B-2021		1	671881	PQD2	EET CLE	09/15/25 20:41
Total/NA	Analysis	2540 C-2020		1	671967	TAV2	EET CLE	09/16/25 15:19
Total/NA	Analysis	300.0		5	671806	JMR	EET CLE	09/16/25 10:43
Total/NA	Analysis	300.0		20	671806	JMR	EET CLE	09/16/25 10:52
Total/NA	Prep	PrecSep-21			736722	JTR	EET SL	09/19/25 07:53
Total/NA	Analysis	9315		1	740386	SWS	EET SL	10/13/25 19:33
Total/NA	Prep	PrecSep_0			736723	JTR	EET SL	09/19/25 08:00
Total/NA	Analysis	9320		1	740415	SWS	EET SL	10/13/25 15:52
Total/NA	Analysis	Ra226_Ra228		1	740621	CAH	EET SL	10/15/25 10:40

Client Sample ID: 2022-06-F-20250911-01

Lab Sample ID: 240-232994-4

Date Collected: 09/11/25 12:53
Date Received: 09/13/25 13:00

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			671711	F3PF	EET CLE	09/15/25 14:00
Total Recoverable	Analysis	6010D		1	672194	AJC	EET CLE	09/18/25 03:37
Total Recoverable	Prep	3005A			671711	F3PF	EET CLE	09/15/25 14:00
Total Recoverable	Analysis	6020B		1	671935	S4FJ	EET CLE	09/16/25 19:37
Total/NA	Prep	7470A			671720	F3PF	EET CLE	09/15/25 14:00
Total/NA	Analysis	7470A		1	672010	GEV	EET CLE	09/16/25 19:15
Total/NA	Analysis	2320 B-2021		1	671881	PQD2	EET CLE	09/15/25 20:51
Total/NA	Analysis	2540 C-2020		1	671967	TAV2	EET CLE	09/16/25 15:18
Total/NA	Analysis	300.0		1	671806	JMR	EET CLE	09/16/25 11:01
Total/NA	Prep	PrecSep-21			736722	JTR	EET SL	09/19/25 07:53
Total/NA	Analysis	9315		1	740386	SWS	EET SL	10/13/25 19:33
Total/NA	Prep	PrecSep_0			736723	JTR	EET SL	09/19/25 08:00
Total/NA	Analysis	9320		1	740415	SWS	EET SL	10/13/25 15:52
Total/NA	Analysis	Ra226_Ra228		1	740621	CAH	EET SL	10/15/25 14:25

Client Sample ID: 96158-F-20250911-01
Lab Sample ID: 240-232994-5

Date Collected: 09/11/25 13:47
Matrix: Water
Date Received: 09/13/25 13:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			671711	F3PF	EET CLE	09/15/25 14:00
Total Recoverable	Analysis	6010D		1	672194	AJC	EET CLE	09/18/25 03:41
Total Recoverable	Prep	3005A			671711	F3PF	EET CLE	09/15/25 14:00
Total Recoverable	Analysis	6020B		1	671935	S4FJ	EET CLE	09/16/25 19:39
Total/NA	Prep	7470A			671720	F3PF	EET CLE	09/15/25 14:00
Total/NA	Analysis	7470A		1	672010	GEV	EET CLE	09/16/25 19:17
Total/NA	Analysis	2320 B-2021		1	671881	PQD2	EET CLE	09/15/25 21:00
Total/NA	Analysis	2540 C-2020		1	671967	TAV2	EET CLE	09/16/25 15:18
Total/NA	Analysis	300.0		1	671806	JMR	EET CLE	09/16/25 11:18
Total/NA	Analysis	300.0		10	671806	JMR	EET CLE	09/16/25 11:26
Total/NA	Prep	PrecSep-21			736722	JTR	EET SL	09/19/25 07:53
Total/NA	Analysis	9315		1	740386	SWS	EET SL	10/13/25 19:33
Total/NA	Prep	PrecSep_0			736723	JTR	EET SL	09/19/25 08:00
Total/NA	Analysis	9320		1	740415	SWS	EET SL	10/13/25 15:52
Total/NA	Analysis	Ra226_Ra228		1	740621	CAH	EET SL	10/15/25 14:25

Client Sample ID: DUP-001-F-20250911-01
Lab Sample ID: 240-232994-6

Date Collected: 09/11/25 00:00
Matrix: Water
Date Received: 09/13/25 13:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			671711	F3PF	EET CLE	09/15/25 14:00
Total Recoverable	Analysis	6010D		1	672194	AJC	EET CLE	09/18/25 03:55
Total Recoverable	Prep	3005A			671711	F3PF	EET CLE	09/15/25 14:00
Total Recoverable	Analysis	6020B		1	671935	S4FJ	EET CLE	09/16/25 19:42
Total/NA	Prep	7470A			671720	F3PF	EET CLE	09/15/25 14:00
Total/NA	Analysis	7470A		1	672010	GEV	EET CLE	09/16/25 19:19
Total/NA	Analysis	2320 B-2021		1	671881	PQD2	EET CLE	09/15/25 21:08
Total/NA	Analysis	2540 C-2020		1	671967	TAV2	EET CLE	09/16/25 15:18
Total/NA	Analysis	300.0		1	671806	JMR	EET CLE	09/16/25 11:35
Total/NA	Analysis	300.0		10	671806	JMR	EET CLE	09/16/25 11:44
Total/NA	Prep	PrecSep-21			736722	JTR	EET SL	09/19/25 07:53
Total/NA	Analysis	9315		1	740386	SWS	EET SL	10/13/25 19:34
Total/NA	Prep	PrecSep_0			736723	JTR	EET SL	09/19/25 08:00
Total/NA	Analysis	9320		1	740415	SWS	EET SL	10/13/25 15:52
Total/NA	Analysis	Ra226_Ra228		1	740621	CAH	EET SL	10/15/25 14:25

Client Sample ID: 96157-F-20250911-01
Lab Sample ID: 240-232994-7

Date Collected: 09/11/25 14:36
Matrix: Water
Date Received: 09/13/25 13:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			671711	F3PF	EET CLE	09/15/25 14:00
Total Recoverable	Analysis	6010D		1	672194	AJC	EET CLE	09/18/25 03:59

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-232994-1
Project/Site: Federal CCR Wells

Client Sample ID: 96157-F-20250911-01
Lab Sample ID: 240-232994-7
Date Collected: 09/11/25 14:36
Matrix: Water
Date Received: 09/13/25 13:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			671711	F3PF	EET CLE	09/15/25 14:00
Total Recoverable	Analysis	6020B		1	671935	S4FJ	EET CLE	09/16/25 19:45
Total/NA	Prep	7470A			671720	F3PF	EET CLE	09/15/25 14:00
Total/NA	Analysis	7470A		1	672010	GEV	EET CLE	09/16/25 19:21
Total/NA	Analysis	2320 B-2021		1	671881	PQD2	EET CLE	09/15/25 21:16
Total/NA	Analysis	2540 C-2020		1	671967	TAV2	EET CLE	09/16/25 15:18
Total/NA	Analysis	300.0		1	671806	JMR	EET CLE	09/16/25 11:52
Total/NA	Analysis	300.0		10	671806	JMR	EET CLE	09/16/25 12:19
Total/NA	Prep	PrecSep-21			737002	JTR	EET SL	09/22/25 08:07
Total/NA	Analysis	9315		1	740598	SWS	EET SL	10/14/25 22:15
Total/NA	Prep	PrecSep_0			737003	JTR	EET SL	09/22/25 08:13
Total/NA	Analysis	9320		1	740611	SWS	EET SL	10/14/25 11:52
Total/NA	Analysis	Ra226_Ra228		1	740621	CAH	EET SL	10/15/25 14:25

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

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

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-232994-1
Project/Site: Federal CCR Wells

Laboratory: Eurofins Cleveland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0806	12-31-26
Georgia	State	4062	02-27-26
Illinois	NELAP	200004	08-31-26
Iowa	State	421	06-01-27
Kansas	NELAP	E-10336	01-31-26
Kentucky (UST)	State	112225	02-28-26
Kentucky (WW)	State	KY98016	12-31-25
Minnesota	NELAP	039-999-348	12-31-25
New Hampshire	NELAP	2250	09-30-25
New Jersey	NELAP	OH001	06-30-26
New York	NELAP	10975	04-01-26
North Dakota	State	R-244	02-27-26
Ohio	State	8303	11-04-25
Ohio VAP	State	ORELAP 4062	02-28-26
Oregon	NELAP	4062	02-27-26
Pennsylvania	NELAP	68-00340	08-31-26
Texas	NELAP	T104704517	08-31-26
US Fish & Wildlife	US Federal Programs	A26406	02-28-26
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	09-14-26
West Virginia DEP	State	210	12-31-25
Wisconsin	State	399167560	08-31-26

Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-27
ANAB	Dept. of Defense ELAP	L2305	04-06-27
ANAB	Dept. of Energy	L2305.01	04-06-27
ANAB	ISO/IEC 17025	L2305	04-06-27
Arizona	State	AZ0813	12-08-25
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	07-01-26
Connecticut	State	PH-0241	03-31-27
Florida	NELAP	E87689	06-30-26
HI - RadChem Recognition	State	n/a	06-30-26
Illinois	NELAP	200023	11-30-25
Iowa	State	373	12-01-26
Kansas	NELAP	E-10236	10-31-25
Kentucky (DW)	State	KY90125	12-31-25
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-25
Louisiana (All)	NELAP	106151	06-30-26
Louisiana (DW)	State	LA011	12-31-25
Maryland	State	310	10-01-26
Massachusetts	State	M-MO054	06-30-26
MI - RadChem Recognition	State	9005	06-30-26
Missouri	State	780	06-30-28
Nevada	State	MO00054	07-31-26

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-232994-1
Project/Site: Federal CCR Wells

Laboratory: Eurofins St. Louis (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New Jersey	NELAP	MO002	06-30-26
New Mexico	State	MO00054	06-30-26
New York	NELAP	11616	03-31-26
North Carolina (DW)	State	29700	06-30-26
North Dakota	State	R-207	06-30-25 *
Oklahoma	NELAP	9997	12-31-25
Oregon	NELAP	4157	09-01-26
Pennsylvania	NELAP	68-00540	02-28-26
South Carolina	State	85002	06-30-26
Texas	NELAP	T104704193	07-31-26
US Fish & Wildlife	US Federal Programs	058448	07-31-26
USDA	US Federal Programs	525-23-138-94730	05-18-26
Utah	NELAP	MO00054	07-31-26
Virginia	NELAP	460230	06-14-26
Washington	State	C592	08-31-26
West Virginia DEP	State	381	10-31-25

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

Columbus 209

eurofins Environment Testing

Client Information	Sampler: Bobby Casto	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s):	COC No. 240-111832-39818.1
Client Contact: Taylor Huffman	Phone: (740) 373-4308	E-Mail: roxanne.cisneros@et.eurofinsus.com	State of Origin:	Page: Page 1 of 8
Company: Lightstone Generation Gavin Power LLC	PWSID			Job #:
Address: 7397 OH-7	Due Date Requested:			
City: Cheshire	TAT Requested (days):			
State, Zip: OH, 45620	Compliance Project: Δ Yes Δ No			
Phone: 740-925-3171(Tel)	PO #: 2935505			
Email: taylor.huffman@lightstonegen.com	WO #:			
Project Name: Gavin CCR	Project #: 24019633			
Site: Gavin	SSOW#:			

Analysis Requested

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=wastoil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B, 6020, 7470A	2540C_Calcd - TDS	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	300.0_28D - Chloride, Fluoride & Sulfate	2320B - (MOD) Alkalinity	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	N	D	N	N		
2016-10-F-20250910-01	9-10-25	1133	G	Water			1	1	2	1	1	6	
2016-06-F-20250910-01	9-10-25	1437	G	Water			1	1	2	1	1	6	
2016-06-F-20250910-MS-01	9-10-25	1437	G	Water		MS	1	1	2	1	1	6	
2016-06-F-20250910-MSD-01	9-10-25	1437	G	Water		MSD	1	1	2	1	1	6	
2016-07-F-20250911-01	9-11-25	1103	G	Water			1	1	2	1	1	6	
2022-06-F-20250911-01	9-11-25	1253	G	Water			1	1	2	1	1	6	
96158-F-20250911-01	9-11-25	1347	G	Water			1	1	2	1	1	6	
DUP-001-F-20250911-01	9-11-25	—	G	Water			1	1	2	1	1	6	
96157-F-20250911-01	9-11-25	1436	G	Water			1	1	2	1	1	6	
				Water									
				Water									

240-232994 COC

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
	9-12-25/0938	KEMRA	Ashley McCloskey	9-12-25 1208	EURO
Relinquished by: Ashley McCloskey	Date/Time: 9-12-25 1700	Company EURO	Received by: J Collins	Date/Time: 9-13-25 1300	Company EUR
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 06/08/2021

Eurofins – Cleveland Sample Receipt Form/Narrative Login # _____
Barberton Facility

Client Gavin Site Name _____ Cooler unpacked by: JC
Cooler Received on 9-13-25 Opened on 9-13-25
FedEx: 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other _____
Receipt After-hours Drop-off Date/Time _____ Storage Location _____
Eurofins Cooler # EC 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 # 13 (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 1	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)? 9/13/25	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# ~~HC461227~~ HC567196 JC 9/13/25
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

Labeled by:
Labels Verified 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 # _____

Eurofins - Cleveland Sample Receipt Multiple Cooler Form

Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
(EC) Client Box Other	IR GUN #: 13	1.7	1.9	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #:	3.1	3.3	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #:	1.4	1.6	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #:	1.2	1.4	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #:	1.3	1.5	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #:	18.9	19.0	Wet Ice Blue Ice Dry Ice Water (None)
(EC) Client Box Other	IR GUN #:	0.6	0.8	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #:	0.7	0.9	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #:	0.5	0.7	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #:	1.1	1.3	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #:	0.2	0.4	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #:	0.4	0.6	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #:	4.0	4.2	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #:	3.3	3.5	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #:	3.7	3.9	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #:	0.3	0.5	(Wet Ice) Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None

☐ See Temperature Excursion Form

9/13/2025

Login Container Summary Report

240-232994

10/15/2025

Temperature readings _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
2016-10-F-20250910-01	240-232994-A 1	Plastic 60 mL - unpreserved				
2016 10-F-20250910-01	240-232994-B-1	Plastic 125mL - unpreserved				
2016-10-F-20250910-01	240 232994-C-1	Plastic 500ml unpreserved				
2016-10-F-20250910-01	240-232994-D-1	Plastic 500ml - with Nitric Acid	<2			
2016-10-F-20250910-01	240-232994 E-1	Plastic 1 liter - Nitric Acid	<2			
2016-10-F-20250910-01	240-232994-F-1	Plastic 1 liter - Nitric Acid	<2			
2016-06-F-20250910-01	240-232994-A-2	Plastic 60 mL - unpreserved				
2016-06-F-20250910-01	240-232994-A-2 MS	Plastic 60 mL - unpreserved				
2016-06-F-20250910-01	240-232994-A 2 MSD	Plastic 60 mL - unpreserved				
2016-06-F-20250910-01	240-232994-B-2	Plastic 125mL - unpreserved				
2016-06-F-20250910-01	240-232994 B 2 MS	Plastic 125mL unpreserved				
2016-06-F-20250910-01	240-232994-B-2 MSD	Plastic 125mL - unpreserved				
2016-06-F-20250910-01	240-232994-C-2	Plastic 500ml - unpreserved				
2016-06-F 20250910-01	240-232994-C-2 MS	Plastic 500ml - unpreserved				
2016-06-F-20250910-01	240-232994-C-2 MSD	Plastic 500ml - unpreserved				
2016-06-F-20250910-01	240-232994-D-2	Plastic 500ml with Nitric Acid	<2			
2016-06-F-20250910-01	240-232994-D-2 MS	Plastic 500ml - with Nitric Acid	<2			
2016-06-F-20250910-01	240-232994-D-2 MSD	Plastic 500ml - with Nitric Acid	<2			
2016-06-F-20250910-01	240-232994-E-2	Plastic 1 liter - Nitric Acid	<2			
2016-06-F-20250910-01	240-232994 E-2 MS	Plastic 1 liter - Nitric Acid	<2			
2016-06-F-20250910-01	240-232994-E-2 MSD	Plastic 1 liter - Nitric Acid	<2			
2016-06-F-20250910-01	240-232994 F 2	Plastic 1 liter - Nitric Acid	<2			
2016-06-F-20250910-01	240-232994-F-2 MS	Plastic 1 liter - Nitric Acid	<2			
2016-06-F-20250910-01	240-232994-F-2 MSD	Plastic 1 liter - Nitric Acid	<2			
2016-07-F 20250911-01	240-232994-A-3	Plastic 60 mL unpreserved				
2016-07-F-20250911-01	240-232994-B-3	Plastic 125mL - unpreserved				
2016-07-F-20250911-01	240-232994-C-3	Plastic 500ml unpreserved				
2016-07-F-20250911-01	240-232994-D-3	Plastic 500ml - with Nitric Acid	<2			
2016-07-F-20250911-01	240-232994-E-3	Plastic 1 liter Nitric Acid	<2			
2016-07-F-20250911-01	240-232994-F-3	Plastic 1 liter - Nitric Acid	<2			
2022-06-F-20250911-01	240-232994-A-4	Plastic 60 mL - unpreserved				
2022-06-F-20250911-01	240-232994-B-4	Plastic 125mL - unpreserved				

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
2022-06-F-20250911-01	240 232994-C-4	Plastic 500ml - unpreserved				
2022-06-F-20250911-01	240-232994-D-4	Plastic 500ml - with Nitric Acid	<2			
2022-06-F-20250911-01	240-232994-E-4	Plastic 1 liter - Nitric Acid	<2			
2022-06-F-20250911-01	240-232994-F-4	Plastic 1 liter - Nitric Acid	<2			
96158-F-20250911-01	240-232994-A-5	Plastic 60 mL - unpreserved				
96158 F 20250911-01	240-232994-B-5	Plastic 125mL - unpreserved				
96158-F-20250911-01	240-232994-C-5	Plastic 500ml - unpreserved				
96158-F-20250911-01	240-232994-D-5	Plastic 500ml - with Nitric Acid	<2			
96158-F-20250911-01	240-232994-E-5	Plastic 1 liter - Nitric Acid	<2			
96158-F-20250911-01	240-232994-F-5	Plastic 1 liter - Nitric Acid	<2			
DUP-001 F 20250911-01	240-232994-A-6	Plastic 60 mL - unpreserved				
DUP-001-F-20250911-01	240-232994-B-6	Plastic 125mL - unpreserved				
DUP-001-F 20250911-01	240-232994-C-6	Plastic 500ml - unpreserved				
DUP-001-F-20250911-01	240-232994-D-6	Plastic 500ml - with Nitric Acid	<2			
DUP-001-F-20250911-01	240-232994-E-6	Plastic 1 liter - Nitric Acid	<2			
DUP-001-F-20250911-01	240-232994-F-6	Plastic 1 liter - Nitric Acid	<2			
96157-F 20250911-01	240 232994-A 7	Plastic 60 mL - unpreserved				
96157-F-20250911-01	240-232994-B-7	Plastic 125mL - unpreserved				
96157-F 20250911-01	240-232994-C-7	Plastic 500ml - unpreserved				
96157-F-20250911-01	240-232994-D-7	Plastic 500ml - with Nitric Acid	<2			
96157-F-20250911-01	240-232994-E-7	Plastic 1 liter - Nitric Acid	<2			
96157-F-20250911-01	240-232994-F-7	Plastic 1 liter - Nitric Acid	<2			

Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-232994-1

Login Number: 232994
List Number: 2
Creator: Forrest, Cheyenne L

List Source: Eurofins St. Louis
List Creation: 09/16/25 01:42 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?	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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620

Generated 10/16/2025 3:42:56 PM

JOB DESCRIPTION

Federal CCR Wells

JOB NUMBER

240-233162-1

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization

Roxanne Cisneros

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Authorized for release by
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Client: Lightstone Generation Gavin Power LLC
Job ID: 240-233162-1
Project/Site: Federal CCR Wells

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.
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
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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: 240-233162-1 — Eurofins Cleveland

Job Narrative
240-233162-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The samples were received on 9/17/2025 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 0.5°C, 0.7°C, 4.3°C and 4.7°C.

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

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

Gas Flow Proportional Counter
Method 9320_Ra228: Radium 228 Batch 737006

The detection goal was not met for the following sample due to a reduced sample volume used in prep attributed to the presence of matrix interferences. 2022-04-F-20250912-01 (240-233162-3)

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

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

Method Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-233162-1
Project/Site: Federal CCR Wells

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CLE
6020B	Metals (ICP/MS)	SW846	EET CLE
7470A	Mercury (CVAA)	SW846	EET CLE
2320 B-2021	Alkalinity	SM	EET CLE
2540 C-2020	Solids, Total Dissolved (TDS)	SM	EET CLE
300.0	Anions, Ion Chromatography	EPA	EET CLE
9315	Radium 226 by GFPC	SW846	EET SL
9320	Radium-228 (GFPC)	SW846	EET SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	EET SL
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CLE
7470A	Preparation, Mercury	SW846	EET CLE
PrecSep_0	Preparation, Precipitate Separation	None	EET SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	EET SL

Protocol References:

EPA = US Environmental Protection Agency

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:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

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

Sample Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-233162-1
Project/Site: Federal CCR Wells

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
240-233162-1	96154R-F-20250912-01	Water	09/12/25 11:57	09/17/25 08:00	Ohio
240-233162-2	2022-05-F-20250912-01	Water	09/12/25 13:37	09/17/25 08:00	Ohio
240-233162-3	2022-04-F-20250912-01	Water	09/12/25 14:29	09/17/25 08:00	Ohio
240-233162-4	FIELD BLANK-001-F-20250912-01	Water	09/12/25 15:20	09/17/25 08:00	Ohio

Detection Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-233162-1

Client Sample ID: 96154R-F-20250912-01 — Lab Sample ID: 240-233162-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	490		100	57	ug/L	1		6010D	Total Recoverable
Antimony	0.69	J	2.0	0.57	ug/L	1		6020B	Total Recoverable
Arsenic	4.7	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	140		5.0	0.77	ug/L	1		6020B	Total Recoverable
Cadmium	0.11	J	1.0	0.077	ug/L	1		6020B	Total Recoverable
Calcium	16000		1000	250	ug/L	1		6020B	Total Recoverable
Chromium	1.5	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	0.32	J	1.0	0.086	ug/L	1		6020B	Total Recoverable
Lead	0.48	J	1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	62		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	980	J	1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	110		5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	4900		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	560000		1000	880	ug/L	1		6020B	Total Recoverable
Total Alkalinity	500	B	5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	280	B	5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Carbonate Alkalinity as CaCO3	220		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	1300		20	16	mg/L	1		2540 C-2020	Total/NA
Chloride	450		10	1.3	mg/L	10		300.0	Total/NA
Fluoride	3.8		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	43		1.0	0.35	mg/L	1		300.0	Total/NA

Client Sample ID: 2022-05-F-20250912-01 — Lab Sample ID: 240-233162-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	400		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	2.2	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	2800		5.0	0.77	ug/L	1		6020B	Total Recoverable
Calcium	95000		1000	250	ug/L	1		6020B	Total Recoverable
Cobalt	0.76	J	1.0	0.086	ug/L	1		6020B	Total Recoverable
Lithium	90		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	29000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	25		5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	6800		1000	220	ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland

Detection Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-233162-1

Client Sample ID: 2022-05-F-20250912-01 (Continued) — Lab Sample ID: 240-233162-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	3600000		10000	8800	ug/L	10		6020B	Total Recoverable
Total Alkalinity	190	B	5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	190	B	5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	8200		100	78	mg/L	1		2540 C-2020	Total/NA
Chloride	5400		50	6.4	mg/L	50		300.0	Total/NA
Fluoride	1.3		0.25	0.12	mg/L	5		300.0	Total/NA
Sulfate	31		5.0	1.7	mg/L	5		300.0	Total/NA

Client Sample ID: 2022-04-F-20250912-01 — Lab Sample ID: 240-233162-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	830		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	1.3	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	95		5.0	0.77	ug/L	1		6020B	Total Recoverable
Calcium	130000		1000	250	ug/L	1		6020B	Total Recoverable
Chromium	3.3	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	0.85	J	1.0	0.086	ug/L	1		6020B	Total Recoverable
Lead	0.91	J	1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	27		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	39000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	1.4	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	4600		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	91000		1000	880	ug/L	1		6020B	Total Recoverable
Total Alkalinity	470	B	5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	470	B	5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	720		10	7.8	mg/L	1		2540 C-2020	Total/NA
Chloride	36		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.11		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	130		1.0	0.35	mg/L	1		300.0	Total/NA

Client Sample ID: FIELD BLANK-001-F-20250912-01 — Lab Sample ID: 240-233162-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1100		100	57	ug/L	1		6010D	Total Recoverable
Total Alkalinity	3.1	J B	5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	3.1	J B	5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	18		10	7.8	mg/L	1		2540 C-2020	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 96154R-F-20250912-01
Date Collected: 09/12/25 11:57
Date Received: 09/17/25 08:00

Lab Sample ID: 240-233162-1
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	490		100	57	ug/L		09/17/25 14:00	09/18/25 15:31	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.69	J	2.0	0.57	ug/L		09/17/25 14:00	09/18/25 14:42	1
Arsenic	4.7	J	5.0	0.75	ug/L		09/17/25 14:00	09/18/25 14:42	1
Barium	140		5.0	0.77	ug/L		09/17/25 14:00	09/18/25 14:42	1
Beryllium	ND		1.0	0.27	ug/L		09/17/25 14:00	09/18/25 14:42	1
Cadmium	0.11	J	1.0	0.077	ug/L		09/17/25 14:00	09/18/25 14:42	1
Calcium	16000		1000	250	ug/L		09/17/25 14:00	09/18/25 14:42	1
Chromium	1.5	J	5.0	1.2	ug/L		09/17/25 14:00	09/18/25 14:42	1
Cobalt	0.32	J	1.0	0.086	ug/L		09/17/25 14:00	09/18/25 14:42	1
Lead	0.48	J	1.0	0.45	ug/L		09/17/25 14:00	09/18/25 14:42	1
Lithium	62		8.0	3.4	ug/L		09/17/25 14:00	09/18/25 14:42	1
Magnesium	980	J	1000	61	ug/L		09/17/25 14:00	09/18/25 14:42	1
Molybdenum	110		5.0	1.1	ug/L		09/17/25 14:00	09/18/25 14:42	1
Potassium	4900		1000	220	ug/L		09/17/25 14:00	09/18/25 14:42	1
Selenium	ND		5.0	0.89	ug/L		09/17/25 14:00	09/18/25 14:42	1
Sodium	560000		1000	880	ug/L		09/17/25 14:00	09/18/25 14:42	1
Thallium	ND		1.0	0.51	ug/L		09/17/25 14:00	09/18/25 14:42	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		09/17/25 14:00	09/18/25 11:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	500	B	5.0	2.6	mg/L			09/18/25 12:06	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	280	B	5.0	2.6	mg/L			09/18/25 12:06	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	220		5.0	2.6	mg/L			09/18/25 12:06	1
Total Dissolved Solids (SM 2540 C-2020)	1300		20	16	mg/L			09/17/25 14:46	1
Chloride (EPA 300.0)	450		10	1.3	mg/L			09/18/25 11:25	10
Fluoride (EPA 300.0)	3.8		0.050	0.024	mg/L			09/18/25 11:16	1
Sulfate (EPA 300.0)	43		1.0	0.35	mg/L			09/18/25 11:16	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.211	U	0.340	0.340	1.00	0.587	pCi/L	09/22/25 08:15	10/15/25 17:17	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*69.3*		*30 - 110*	*09/22/25 08:15*	*10/15/25 17:17*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.985		0.639	0.646	1.00	0.937	pCi/L	09/22/25 08:22	10/15/25 09:55	1

Client Sample ID: 96154R-F-20250912-01
Date Collected: 09/12/25 11:57
Date Received: 09/17/25 08:00

Lab Sample ID: 240-233162-1
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*69.3*		*30 - 110*	*09/22/25 08:22*	*10/15/25 09:55*	*1*
Y Carrier	*77.8*		*30 - 110*	*09/22/25 08:22*	*10/15/25 09:55*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**1.20**		0.724	0.730	5.00	0.937	pCi/L		10/15/25 14:25	1

Client Sample ID: 2022-05-F-20250912-01
Date Collected: 09/12/25 13:37
Date Received: 09/17/25 08:00

Lab Sample ID: 240-233162-2
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**400**		100	57	ug/L		09/17/25 14:00	09/18/25 16:34	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		09/17/25 14:00	09/18/25 15:22	1
Arsenic	**2.2**	**J**	5.0	0.75	ug/L		09/17/25 14:00	09/18/25 15:22	1
Barium	**2800**		5.0	0.77	ug/L		09/17/25 14:00	09/18/25 15:22	1
Beryllium	ND		1.0	0.27	ug/L		09/17/25 14:00	09/18/25 15:22	1
Cadmium	ND		1.0	0.077	ug/L		09/17/25 14:00	09/18/25 15:22	1
Calcium	**95000**		1000	250	ug/L		09/17/25 14:00	09/18/25 15:22	1
Chromium	ND		5.0	1.2	ug/L		09/17/25 14:00	09/18/25 15:22	1
Cobalt	**0.76**	**J**	1.0	0.086	ug/L		09/17/25 14:00	09/18/25 15:22	1
Lead	ND		1.0	0.45	ug/L		09/17/25 14:00	09/18/25 15:22	1
Lithium	**90**		8.0	3.4	ug/L		09/17/25 14:00	09/18/25 15:22	1
Magnesium	**29000**		1000	61	ug/L		09/17/25 14:00	09/18/25 15:22	1
Molybdenum	**25**		5.0	1.1	ug/L		09/17/25 14:00	09/18/25 15:22	1
Potassium	**6800**		1000	220	ug/L		09/17/25 14:00	09/18/25 15:22	1
Selenium	ND		5.0	0.89	ug/L		09/17/25 14:00	09/18/25 15:22	1
Sodium	**3600000**		10000	8800	ug/L		09/17/25 14:00	09/19/25 12:55	10
Thallium	ND		1.0	0.51	ug/L		09/17/25 14:00	09/18/25 15:22	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		09/17/25 14:00	09/18/25 12:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	**190**	**B**	5.0	2.6	mg/L			09/18/25 12:26	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**190**	**B**	5.0	2.6	mg/L			09/18/25 12:26	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			09/18/25 12:26	1
Total Dissolved Solids (SM 2540 C-2020)	**8200**		100	78	mg/L			09/17/25 14:46	1
Chloride (EPA 300.0)	**5400**		50	6.4	mg/L			09/18/25 11:42	50
Fluoride (EPA 300.0)	**1.3**		0.25	0.12	mg/L			09/18/25 11:34	5
Sulfate (EPA 300.0)	**31**		5.0	1.7	mg/L			09/18/25 11:34	5

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**1.65**		0.416	0.442	1.00	0.318	pCi/L	09/22/25 08:15	10/15/25 17:17	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.5*		*30 - 110*	*09/22/25 08:15*	*10/15/25 17:17*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**2.77**		0.641	0.690	1.00	0.648	pCi/L	09/22/25 08:22	10/15/25 09:55	1

Client Sample ID: 2022-05-F-20250912-01
Date Collected: 09/12/25 13:37
Date Received: 09/17/25 08:00

Lab Sample ID: 240-233162-2
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.5*		*30 - 110*	*09/22/25 08:22*	*10/15/25 09:55*	*1*
Y Carrier	*73.3*		*30 - 110*	*09/22/25 08:22*	*10/15/25 09:55*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**4.42**		0.764	0.819	5.00	0.648	pCi/L		10/15/25 14:25	1

Client Sample ID: 2022-04-F-20250912-01
Date Collected: 09/12/25 14:29
Date Received: 09/17/25 08:00

Lab Sample ID: 240-233162-3
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	830		100	57	ug/L		09/17/25 14:00	09/18/25 16:39	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		09/17/25 14:00	09/18/25 15:25	1
Arsenic	1.3	J	5.0	0.75	ug/L		09/17/25 14:00	09/18/25 15:25	1
Barium	95		5.0	0.77	ug/L		09/17/25 14:00	09/18/25 15:25	1
Beryllium	ND		1.0	0.27	ug/L		09/17/25 14:00	09/18/25 15:25	1
Cadmium	ND		1.0	0.077	ug/L		09/17/25 14:00	09/18/25 15:25	1
Calcium	130000		1000	250	ug/L		09/17/25 14:00	09/18/25 15:25	1
Chromium	3.3	J	5.0	1.2	ug/L		09/17/25 14:00	09/18/25 15:25	1
Cobalt	0.85	J	1.0	0.086	ug/L		09/17/25 14:00	09/18/25 15:25	1
Lead	0.91	J	1.0	0.45	ug/L		09/17/25 14:00	09/18/25 15:25	1
Lithium	27		8.0	3.4	ug/L		09/17/25 14:00	09/18/25 15:25	1
Magnesium	39000		1000	61	ug/L		09/17/25 14:00	09/18/25 15:25	1
Molybdenum	1.4	J	5.0	1.1	ug/L		09/17/25 14:00	09/18/25 15:25	1
Potassium	4600		1000	220	ug/L		09/17/25 14:00	09/18/25 15:25	1
Selenium	ND		5.0	0.89	ug/L		09/17/25 14:00	09/18/25 15:25	1
Sodium	91000		1000	880	ug/L		09/17/25 14:00	09/18/25 15:25	1
Thallium	ND		1.0	0.51	ug/L		09/17/25 14:00	09/18/25 15:25	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		09/17/25 14:00	09/18/25 12:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	470	B	5.0	2.6	mg/L			09/18/25 12:18	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	470	B	5.0	2.6	mg/L			09/18/25 12:18	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			09/18/25 12:18	1
Total Dissolved Solids (SM 2540 C-2020)	720		10	7.8	mg/L			09/17/25 14:46	1
Chloride (EPA 300.0)	36		1.0	0.13	mg/L			09/18/25 11:51	1
Fluoride (EPA 300.0)	0.11		0.050	0.024	mg/L			09/18/25 11:51	1
Sulfate (EPA 300.0)	130		1.0	0.35	mg/L			09/18/25 11:51	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.510		0.338	0.341	1.00	0.458	pCi/L	09/22/25 08:15	10/15/25 21:12	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*70.6*		*30 - 110*	*09/22/25 08:15*	*10/15/25 21:12*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.36	G	0.738	0.748	1.00	1.05	pCi/L	09/22/25 08:22	10/15/25 09:55	1

Client Sample ID: 2022-04-F-20250912-01
Date Collected: 09/12/25 14:29
Date Received: 09/17/25 08:00

Lab Sample ID: 240-233162-3
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*70.6*		*30 - 110*	*09/22/25 08:22*	*10/15/25 09:55*	*1*
Y Carrier	*73.3*		*30 - 110*	*09/22/25 08:22*	*10/15/25 09:55*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**1.87**		0.812	0.822	5.00	1.05	pCi/L		10/15/25 14:25	1

Client Sample ID: FIELD BLANK-001-F-20250912-01
Lab Sample ID: 240-233162-4
Date Collected: 09/12/25 15:20
Matrix: Water
Date Received: 09/17/25 08:00

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**1100**		100	57	ug/L		09/17/25 14:00	09/18/25 16:43	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		09/17/25 14:00	09/18/25 15:33	1
Arsenic	ND		5.0	0.75	ug/L		09/17/25 14:00	09/18/25 15:33	1
Barium	ND		5.0	0.77	ug/L		09/17/25 14:00	09/18/25 15:33	1
Beryllium	ND		1.0	0.27	ug/L		09/17/25 14:00	09/18/25 15:33	1
Cadmium	ND		1.0	0.077	ug/L		09/17/25 14:00	09/18/25 15:33	1
Calcium	ND		1000	250	ug/L		09/17/25 14:00	09/18/25 15:33	1
Chromium	ND		5.0	1.2	ug/L		09/17/25 14:00	09/18/25 15:33	1
Cobalt	ND		1.0	0.086	ug/L		09/17/25 14:00	09/18/25 15:33	1
Lead	ND		1.0	0.45	ug/L		09/17/25 14:00	09/18/25 15:33	1
Lithium	ND		8.0	3.4	ug/L		09/17/25 14:00	09/18/25 15:33	1
Magnesium	ND		1000	61	ug/L		09/17/25 14:00	09/18/25 15:33	1
Molybdenum	ND		5.0	1.1	ug/L		09/17/25 14:00	09/18/25 15:33	1
Potassium	ND		1000	220	ug/L		09/17/25 14:00	09/18/25 15:33	1
Selenium	ND		5.0	0.89	ug/L		09/17/25 14:00	09/18/25 15:33	1
Sodium	ND		1000	880	ug/L		09/17/25 14:00	09/18/25 15:33	1
Thallium	ND		1.0	0.51	ug/L		09/17/25 14:00	09/18/25 15:33	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		09/17/25 14:00	09/18/25 12:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	**3.1**	**J B**	5.0	2.6	mg/L			09/18/25 12:33	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**3.1**	**J B**	5.0	2.6	mg/L			09/18/25 12:33	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			09/18/25 12:33	1
Total Dissolved Solids (SM 2540 C-2020)	**18**		10	7.8	mg/L			09/17/25 14:46	1
Chloride (EPA 300.0)	ND		1.0	0.13	mg/L			09/18/25 12:08	1
Fluoride (EPA 300.0)	ND		0.050	0.024	mg/L			09/18/25 12:08	1
Sulfate (EPA 300.0)	ND		1.0	0.35	mg/L			09/18/25 12:08	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.00846	U	0.208	0.208	1.00	0.409	pCi/L	09/22/25 08:15	10/15/25 21:12	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.3*		*30 - 110*	*09/22/25 08:15*	*10/15/25 21:12*	*1*

Method: SW846 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	0.357	0.358	1.00	0.606	pCi/L	09/22/25 08:22	10/15/25 09:55	1

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-233162-1

Client Sample ID: FIELD BLANK-001-F-20250912-01
Date Collected: 09/12/25 15:20
Date Received: 09/17/25 08:00

Lab Sample ID: 240-233162-4
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.3*		*30 - 110*	*09/22/25 08:22*	*10/15/25 09:55*	*1*
Y Carrier	*79.6*		*30 - 110*	*09/22/25 08:22*	*10/15/25 09:55*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.220	U	0.413	0.414	5.00	0.606	pCi/L		10/15/25 14:25	1

Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-233162-1

Method: 9315 - Radium 226 by GFPC

Matrix: Water **Prep Type: Total/NA**

		Percent Yield (Acceptance Limits)						
		Ba						
Lab Sample ID	Client Sample ID	(30-110)						
240-233162-1	96154R-F-20250912-01	69.3						
240-233162-2	2022-05-F-20250912-01	84.5						
240-233162-3	2022-04-F-20250912-01	70.6						
240-233162-4	FIELD BLANK-001-F-20250912-01	84.3						
LCS 160-737004/2-A	Lab Control Sample	94.4						
MB 160-737004/1-A	Method Blank	95.7						

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	(30-110)	(30-110)					
240-233162-1	96154R-F-20250912-01	69.3	77.8					
240-233162-2	2022-05-F-20250912-01	84.5	73.3					
240-233162-3	2022-04-F-20250912-01	70.6	73.3					
240-233162-4	FIELD BLANK-001-F-20250912-01	84.3	79.6					
LCS 160-737006/2-A	Lab Control Sample	94.4	82.6					
MB 160-737006/1-A	Method Blank	95.7	83.4					

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-672064/1-A
Matrix: Water
Analysis Batch: 672329

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 672064

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		09/17/25 14:00	09/18/25 15:22	1

Lab Sample ID: LCS 240-672064/2-A
Matrix: Water
Analysis Batch: 672329

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 672064

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Boron			1000	1070		ug/L		107	80 - 120		

Lab Sample ID: 240-233162-1 MS
Matrix: Water
Analysis Batch: 672329

Client Sample ID: 96154R-F-20250912-01
Prep Type: Total Recoverable
Prep Batch: 672064

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Boron	490		1000	1550		ug/L		106	75 - 125		

Lab Sample ID: 240-233162-1 MSD
Matrix: Water
Analysis Batch: 672329

Client Sample ID: 96154R-F-20250912-01
Prep Type: Total Recoverable
Prep Batch: 672064

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	490		1000	1550		ug/L		105	75 - 125	0	20

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-672064/1-A
Matrix: Water
Analysis Batch: 672347

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 672064

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		09/17/25 14:00	09/18/25 14:37	1
Arsenic	ND		5.0	0.75	ug/L		09/17/25 14:00	09/18/25 14:37	1
Barium	ND		5.0	0.77	ug/L		09/17/25 14:00	09/18/25 14:37	1
Beryllium	ND		1.0	0.27	ug/L		09/17/25 14:00	09/18/25 14:37	1
Cadmium	ND		1.0	0.077	ug/L		09/17/25 14:00	09/18/25 14:37	1
Calcium	ND		1000	250	ug/L		09/17/25 14:00	09/18/25 14:37	1
Chromium	ND		5.0	1.2	ug/L		09/17/25 14:00	09/18/25 14:37	1
Cobalt	ND		1.0	0.086	ug/L		09/17/25 14:00	09/18/25 14:37	1
Lead	ND		1.0	0.45	ug/L		09/17/25 14:00	09/18/25 14:37	1
Lithium	ND		8.0	3.4	ug/L		09/17/25 14:00	09/18/25 14:37	1
Magnesium	ND		1000	61	ug/L		09/17/25 14:00	09/18/25 14:37	1
Molybdenum	ND		5.0	1.1	ug/L		09/17/25 14:00	09/18/25 14:37	1
Potassium	ND		1000	220	ug/L		09/17/25 14:00	09/18/25 14:37	1
Selenium	ND		5.0	0.89	ug/L		09/17/25 14:00	09/18/25 14:37	1
Sodium	ND		1000	880	ug/L		09/17/25 14:00	09/18/25 14:37	1
Thallium	ND		1.0	0.51	ug/L		09/17/25 14:00	09/18/25 14:37	1

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

Lab Sample ID: LCS 240-672064/3-A
Matrix: Water
Analysis Batch: 672347

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 672064

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Antimony			100	97.3		ug/L		97	80 - 120		
Arsenic			1000	976		ug/L		98	80 - 120		
Barium			1000	955		ug/L		96	80 - 120		
Beryllium			500	493		ug/L		99	80 - 120		
Cadmium			500	476		ug/L		95	80 - 120		
Calcium			25000	24600		ug/L		98	80 - 120		
Chromium			500	496		ug/L		99	80 - 120		
Cobalt			500	479		ug/L		96	80 - 120		
Lead			500	543		ug/L		109	80 - 120		
Lithium			500	493		ug/L		99	80 - 120		
Magnesium			25000	24800		ug/L		99	80 - 120		
Molybdenum			500	489		ug/L		98	80 - 120		
Potassium			25000	24900		ug/L		100	80 - 120		
Selenium			1000	983		ug/L		98	80 - 120		
Sodium			25000	24900		ug/L		100	80 - 120		
Thallium			1000	1130		ug/L		113	80 - 120		

Lab Sample ID: 240-233162-1 MS
Matrix: Water
Analysis Batch: 672347

Client Sample ID: 96154R-F-20250912-01
Prep Type: Total Recoverable
Prep Batch: 672064

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Antimony	0.69	J	100	99.3		ug/L		99	80 - 120		
Arsenic	4.7	J	1000	984		ug/L		98	80 - 120		
Barium	140		1000	1070		ug/L		93	80 - 120		
Beryllium	ND		500	487		ug/L		97	80 - 120		
Cadmium	0.11	J	500	457		ug/L		91	80 - 120		
Calcium	16000		25000	39600		ug/L		95	80 - 120		
Chromium	1.5	J	500	479		ug/L		96	80 - 120		
Cobalt	0.32	J	500	468		ug/L		94	80 - 120		
Lead	0.48	J	500	509		ug/L		102	80 - 120		
Lithium	62		500	544		ug/L		96	80 - 120		
Magnesium	980	J	25000	25200		ug/L		97	80 - 120		
Molybdenum	110		500	591		ug/L		97	80 - 120		
Potassium	4900		25000	29500		ug/L		99	80 - 120		
Selenium	ND		1000	961		ug/L		96	80 - 120		
Sodium	560000		25000	563000	4	ug/L		31	80 - 120		
Thallium	ND		1000	1080		ug/L		108	80 - 120		

Lab Sample ID: 240-233162-1 MSD
Matrix: Water
Analysis Batch: 672347

Client Sample ID: 96154R-F-20250912-01
Prep Type: Total Recoverable
Prep Batch: 672064

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	0.69	J	100	99.1		ug/L		98	80 - 120	0	20
Arsenic	4.7	J	1000	1010		ug/L		101	80 - 120	3	20
Barium	140		1000	1080		ug/L		94	80 - 120	1	20
Beryllium	ND		500	490		ug/L		98	80 - 120	1	20
Cadmium	0.11	J	500	458		ug/L		92	80 - 120	0	20

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

Lab Sample ID: 240-233162-1 MSD
Matrix: Water
Analysis Batch: 672347

Client Sample ID: 96154R-F-20250912-01
Prep Type: Total Recoverable
Prep Batch: 672064

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	16000		25000	39100		ug/L		93	80 - 120	1	20
Chromium	1.5	J	500	480		ug/L		96	80 - 120	0	20
Cobalt	0.32	J	500	480		ug/L		96	80 - 120	2	20
Lead	0.48	J	500	512		ug/L		102	80 - 120	1	20
Lithium	62		500	553		ug/L		98	80 - 120	1	20
Magnesium	980	J	25000	25100		ug/L		96	80 - 120	0	20
Molybdenum	110		500	599		ug/L		98	80 - 120	1	20
Potassium	4900		25000	29300		ug/L		98	80 - 120	1	20
Selenium	ND		1000	968		ug/L		97	80 - 120	1	20
Sodium	560000		25000	550000	4	ug/L		-21	80 - 120	2	20
Thallium	ND		1000	1080		ug/L		108	80 - 120	0	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-672069/1-A
Matrix: Water
Analysis Batch: 672304

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 672069

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		09/17/25 14:00	09/18/25 11:54	1

Lab Sample ID: LCS 240-672069/2-A
Matrix: Water
Analysis Batch: 672304

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 672069

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	4.37		ug/L		87	80 - 120

Lab Sample ID: 240-233162-1 MS
Matrix: Water
Analysis Batch: 672304

Client Sample ID: 96154R-F-20250912-01
Prep Type: Total/NA
Prep Batch: 672069

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		1.00	0.931		ug/L		93	80 - 120

Lab Sample ID: 240-233162-1 MSD
Matrix: Water
Analysis Batch: 672304

Client Sample ID: 96154R-F-20250912-01
Prep Type: Total/NA
Prep Batch: 672069

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		1.00	0.958		ug/L		96	80 - 120	3	20

Method: 2320 B-2021 - Alkalinity

Lab Sample ID: MB 240-672415/4
Matrix: Water
Analysis Batch: 672415

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	3.64	J	5.0	2.6	mg/L			09/18/25 11:27	1

Method: 2320 B-2021 - Alkalinity (Continued)

Lab Sample ID: MB 240-672415/4
Matrix: Water
Analysis Batch: 672415

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bicarbonate Alkalinity as CaCO3	3.64	J	5.0	2.6	mg/L			09/18/25 11:27	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			09/18/25 11:27	1

Lab Sample ID: LCS 240-672415/3
Matrix: Water
Analysis Batch: 672415

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	280	260		mg/L		93	86 - 123

Method: 2540 C-2020 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 240-672121/1
Matrix: Water
Analysis Batch: 672121

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	ND		10	7.8	mg/L			09/17/25 14:46	1

Lab Sample ID: LCS 240-672121/2
Matrix: Water
Analysis Batch: 672121

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	176	150		mg/L		85	80 - 120

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-672091/3
Matrix: Water
Analysis Batch: 672091

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.13	mg/L			09/18/25 09:06	1
Fluoride	ND		0.050	0.024	mg/L			09/18/25 09:06	1
Sulfate	ND		1.0	0.35	mg/L			09/18/25 09:06	1

Lab Sample ID: LCS 240-672091/4
Matrix: Water
Analysis Batch: 672091

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	49.2		mg/L		98	90 - 110
Fluoride	2.50	2.52		mg/L		101	90 - 110
Sulfate	50.0	48.9		mg/L		98	90 - 110

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-737004/1-A
Matrix: Water
Analysis Batch: 740742

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 737004

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.006063	U	0.127	0.127	1.00	0.273	pCi/L	09/22/25 08:15	10/15/25 17:15	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*95.7*		*30 - 110*	*09/22/25 08:15*	*10/15/25 17:15*	*1*

Lab Sample ID: LCS 160-737004/2-A
Matrix: Water
Analysis Batch: 740742

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 737004

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-226			9.57	7.474		1.04	1.00	0.276	pCi/L	78	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*94.4*		*30 - 110*

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-737006/1-A
Matrix: Water
Analysis Batch: 740746

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 737006

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.5003	U	0.349	0.352	1.00	0.531	pCi/L	09/22/25 08:22	10/15/25 09:54	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*95.7*		*30 - 110*	*09/22/25 08:22*	*10/15/25 09:54*	*1*
Y Carrier	*83.4*		*30 - 110*	*09/22/25 08:22*	*10/15/25 09:54*	*1*

Lab Sample ID: LCS 160-737006/2-A
Matrix: Water
Analysis Batch: 740746

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 737006

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228			8.01	8.001		1.13	1.00	0.532	pCi/L	100	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*94.4*		*30 - 110*
Y Carrier	*82.6*		*30 - 110*

Metals

Prep Batch: 672064

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233162-1	96154R-F-20250912-01	Total Recoverable	Water	3005A	
240-233162-2	2022-05-F-20250912-01	Total Recoverable	Water	3005A	
240-233162-3	2022-04-F-20250912-01	Total Recoverable	Water	3005A	
240-233162-4	FIELD BLANK-001-F-20250912-01	Total Recoverable	Water	3005A	
MB 240-672064/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-672064/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-672064/3-A	Lab Control Sample	Total Recoverable	Water	3005A	
240-233162-1 MS	96154R-F-20250912-01	Total Recoverable	Water	3005A	
240-233162-1 MS	96154R-F-20250912-01	Total Recoverable	Water	3005A	
240-233162-1 MSD	96154R-F-20250912-01	Total Recoverable	Water	3005A	
240-233162-1 MSD	96154R-F-20250912-01	Total Recoverable	Water	3005A	

Prep Batch: 672069

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233162-1	96154R-F-20250912-01	Total/NA	Water	7470A	
240-233162-2	2022-05-F-20250912-01	Total/NA	Water	7470A	
240-233162-3	2022-04-F-20250912-01	Total/NA	Water	7470A	
240-233162-4	FIELD BLANK-001-F-20250912-01	Total/NA	Water	7470A	
MB 240-672069/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-672069/2-A	Lab Control Sample	Total/NA	Water	7470A	
240-233162-1 MS	96154R-F-20250912-01	Total/NA	Water	7470A	
240-233162-1 MSD	96154R-F-20250912-01	Total/NA	Water	7470A	

Analysis Batch: 672304

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233162-1	96154R-F-20250912-01	Total/NA	Water	7470A	672069
240-233162-2	2022-05-F-20250912-01	Total/NA	Water	7470A	672069
240-233162-3	2022-04-F-20250912-01	Total/NA	Water	7470A	672069
240-233162-4	FIELD BLANK-001-F-20250912-01	Total/NA	Water	7470A	672069
MB 240-672069/1-A	Method Blank	Total/NA	Water	7470A	672069
LCS 240-672069/2-A	Lab Control Sample	Total/NA	Water	7470A	672069
240-233162-1 MS	96154R-F-20250912-01	Total/NA	Water	7470A	672069
240-233162-1 MSD	96154R-F-20250912-01	Total/NA	Water	7470A	672069

Analysis Batch: 672329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233162-1	96154R-F-20250912-01	Total Recoverable	Water	6010D	672064
240-233162-2	2022-05-F-20250912-01	Total Recoverable	Water	6010D	672064
240-233162-3	2022-04-F-20250912-01	Total Recoverable	Water	6010D	672064
240-233162-4	FIELD BLANK-001-F-20250912-01	Total Recoverable	Water	6010D	672064
MB 240-672064/1-A	Method Blank	Total Recoverable	Water	6010D	672064
LCS 240-672064/2-A	Lab Control Sample	Total Recoverable	Water	6010D	672064
240-233162-1 MS	96154R-F-20250912-01	Total Recoverable	Water	6010D	672064
240-233162-1 MSD	96154R-F-20250912-01	Total Recoverable	Water	6010D	672064

Analysis Batch: 672347

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233162-1	96154R-F-20250912-01	Total Recoverable	Water	6020B	672064
240-233162-2	2022-05-F-20250912-01	Total Recoverable	Water	6020B	672064
240-233162-3	2022-04-F-20250912-01	Total Recoverable	Water	6020B	672064
240-233162-4	FIELD BLANK-001-F-20250912-01	Total Recoverable	Water	6020B	672064

Metals (Continued)

Analysis Batch: 672347 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-672064/1-A	Method Blank	Total Recoverable	Water	6020B	672064
LCS 240-672064/3-A	Lab Control Sample	Total Recoverable	Water	6020B	672064
240-233162-1 MS	96154R-F-20250912-01	Total Recoverable	Water	6020B	672064
240-233162-1 MSD	96154R-F-20250912-01	Total Recoverable	Water	6020B	672064

Analysis Batch: 672406

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233162-2	2022-05-F-20250912-01	Total Recoverable	Water	6020B	672064

General Chemistry

Analysis Batch: 672091

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233162-1	96154R-F-20250912-01	Total/NA	Water	300.0	
240-233162-1	96154R-F-20250912-01	Total/NA	Water	300.0	
240-233162-2	2022-05-F-20250912-01	Total/NA	Water	300.0	
240-233162-2	2022-05-F-20250912-01	Total/NA	Water	300.0	
240-233162-3	2022-04-F-20250912-01	Total/NA	Water	300.0	
240-233162-4	FIELD BLANK-001-F-20250912-01	Total/NA	Water	300.0	
MB 240-672091/3	Method Blank	Total/NA	Water	300.0	
LCS 240-672091/4	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 672121

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233162-1	96154R-F-20250912-01	Total/NA	Water	2540 C-2020	
240-233162-2	2022-05-F-20250912-01	Total/NA	Water	2540 C-2020	
240-233162-3	2022-04-F-20250912-01	Total/NA	Water	2540 C-2020	
240-233162-4	FIELD BLANK-001-F-20250912-01	Total/NA	Water	2540 C-2020	
MB 240-672121/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-672121/2	Lab Control Sample	Total/NA	Water	2540 C-2020	

Analysis Batch: 672415

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233162-1	96154R-F-20250912-01	Total/NA	Water	2320 B-2021	
240-233162-2	2022-05-F-20250912-01	Total/NA	Water	2320 B-2021	
240-233162-3	2022-04-F-20250912-01	Total/NA	Water	2320 B-2021	
240-233162-4	FIELD BLANK-001-F-20250912-01	Total/NA	Water	2320 B-2021	
MB 240-672415/4	Method Blank	Total/NA	Water	2320 B-2021	
LCS 240-672415/3	Lab Control Sample	Total/NA	Water	2320 B-2021	

Rad

Prep Batch: 737004

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233162-1	96154R-F-20250912-01	Total/NA	Water	PrecSep-21	
240-233162-2	2022-05-F-20250912-01	Total/NA	Water	PrecSep-21	
240-233162-3	2022-04-F-20250912-01	Total/NA	Water	PrecSep-21	
240-233162-4	FIELD BLANK-001-F-20250912-01	Total/NA	Water	PrecSep-21	
MB 160-737004/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-737004/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-233162-1
Project/Site: Federal CCR Wells

Rad

Prep Batch: 737006

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233162-1	96154R-F-20250912-01	Total/NA	Water	PrecSep_0	
240-233162-2	2022-05-F-20250912-01	Total/NA	Water	PrecSep_0	
240-233162-3	2022-04-F-20250912-01	Total/NA	Water	PrecSep_0	
240-233162-4	FIELD BLANK-001-F-20250912-01	Total/NA	Water	PrecSep_0	
MB 160-737006/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-737006/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-233162-1

Client Sample ID: 96154R-F-20250912-01

Lab Sample ID: 240-233162-1

Date Collected: 09/12/25 11:57
Matrix: Water
Date Received: 09/17/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			672064	F3PF	EET CLE	09/17/25 14:00
Total Recoverable	Analysis	6010D		1	672329	AJC	EET CLE	09/18/25 15:31
Total Recoverable	Prep	3005A			672064	F3PF	EET CLE	09/17/25 14:00
Total Recoverable	Analysis	6020B		1	672347	S4FJ	EET CLE	09/18/25 14:42
Total/NA	Prep	7470A			672069	F3PF	EET CLE	09/17/25 14:00
Total/NA	Analysis	7470A		1	672304	GEV	EET CLE	09/18/25 11:58
Total/NA	Analysis	2320 B-2021		1	672415	JMR	EET CLE	09/18/25 12:06
Total/NA	Analysis	2540 C-2020		1	672121	C5SV	EET CLE	09/17/25 14:46
Total/NA	Analysis	300.0		1	672091	JMR	EET CLE	09/18/25 11:16
Total/NA	Analysis	300.0		10	672091	JMR	EET CLE	09/18/25 11:25
Total/NA	Prep	PrecSep-21			737004	JTR	EET SL	09/22/25 08:15
Total/NA	Analysis	9315		1	740742	SWS	EET SL	10/15/25 17:17
Total/NA	Prep	PrecSep_0			737006	JTR	EET SL	09/22/25 08:22
Total/NA	Analysis	9320		1	740746	SWS	EET SL	10/15/25 09:55
Total/NA	Analysis	Ra226_Ra228		1	740621	CAH	EET SL	10/15/25 14:25

Client Sample ID: 2022-05-F-20250912-01

Lab Sample ID: 240-233162-2

Date Collected: 09/12/25 13:37
Matrix: Water
Date Received: 09/17/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			672064	F3PF	EET CLE	09/17/25 14:00
Total Recoverable	Analysis	6010D		1	672329	AJC	EET CLE	09/18/25 16:34
Total Recoverable	Prep	3005A			672064	F3PF	EET CLE	09/17/25 14:00
Total Recoverable	Analysis	6020B		1	672347	S4FJ	EET CLE	09/18/25 15:22
Total Recoverable	Prep	3005A			672064	F3PF	EET CLE	09/17/25 14:00
Total Recoverable	Analysis	6020B		10	672406	RKT	EET CLE	09/19/25 12:55
Total/NA	Prep	7470A			672069	F3PF	EET CLE	09/17/25 14:00
Total/NA	Analysis	7470A		1	672304	GEV	EET CLE	09/18/25 12:20
Total/NA	Analysis	2320 B-2021		1	672415	JMR	EET CLE	09/18/25 12:26
Total/NA	Analysis	2540 C-2020		1	672121	C5SV	EET CLE	09/17/25 14:46
Total/NA	Analysis	300.0		5	672091	JMR	EET CLE	09/18/25 11:34
Total/NA	Analysis	300.0		50	672091	JMR	EET CLE	09/18/25 11:42
Total/NA	Prep	PrecSep-21			737004	JTR	EET SL	09/22/25 08:15
Total/NA	Analysis	9315		1	740742	SWS	EET SL	10/15/25 17:17
Total/NA	Prep	PrecSep_0			737006	JTR	EET SL	09/22/25 08:22
Total/NA	Analysis	9320		1	740746	SWS	EET SL	10/15/25 09:55
Total/NA	Analysis	Ra226_Ra228		1	740621	CAH	EET SL	10/15/25 14:25

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-233162-1
Project/Site: Federal CCR Wells

Client Sample ID: 2022-04-F-20250912-01
Lab Sample ID: 240-233162-3

Date Collected: 09/12/25 14:29
Matrix: Water
Date Received: 09/17/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			672064	F3PF	EET CLE	09/17/25 14:00
Total Recoverable	Analysis	6010D		1	672329	AJC	EET CLE	09/18/25 16:39
Total Recoverable	Prep	3005A			672064	F3PF	EET CLE	09/17/25 14:00
Total Recoverable	Analysis	6020B		1	672347	S4FJ	EET CLE	09/18/25 15:25
Total/NA	Prep	7470A			672069	F3PF	EET CLE	09/17/25 14:00
Total/NA	Analysis	7470A		1	672304	GEV	EET CLE	09/18/25 12:21
Total/NA	Analysis	2320 B-2021		1	672415	JMR	EET CLE	09/18/25 12:18
Total/NA	Analysis	2540 C-2020		1	672121	C5SV	EET CLE	09/17/25 14:46
Total/NA	Analysis	300.0		1	672091	JMR	EET CLE	09/18/25 11:51
Total/NA	Prep	PrecSep-21			737004	JTR	EET SL	09/22/25 08:15
Total/NA	Analysis	9315		1	740742	SWS	EET SL	10/15/25 21:12
Total/NA	Prep	PrecSep_0			737006	JTR	EET SL	09/22/25 08:22
Total/NA	Analysis	9320		1	740746	SWS	EET SL	10/15/25 09:55
Total/NA	Analysis	Ra226_Ra228		1	740621	CAH	EET SL	10/15/25 14:25

Client Sample ID: FIELD BLANK-001-F-20250912-01
Lab Sample ID: 240-233162-4

Date Collected: 09/12/25 15:20
Matrix: Water
Date Received: 09/17/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			672064	F3PF	EET CLE	09/17/25 14:00
Total Recoverable	Analysis	6010D		1	672329	AJC	EET CLE	09/18/25 16:43
Total Recoverable	Prep	3005A			672064	F3PF	EET CLE	09/17/25 14:00
Total Recoverable	Analysis	6020B		1	672347	S4FJ	EET CLE	09/18/25 15:33
Total/NA	Prep	7470A			672069	F3PF	EET CLE	09/17/25 14:00
Total/NA	Analysis	7470A		1	672304	GEV	EET CLE	09/18/25 12:23
Total/NA	Analysis	2320 B-2021		1	672415	JMR	EET CLE	09/18/25 12:33
Total/NA	Analysis	2540 C-2020		1	672121	C5SV	EET CLE	09/17/25 14:46
Total/NA	Analysis	300.0		1	672091	JMR	EET CLE	09/18/25 12:08
Total/NA	Prep	PrecSep-21			737004	JTR	EET SL	09/22/25 08:15
Total/NA	Analysis	9315		1	740742	SWS	EET SL	10/15/25 21:12
Total/NA	Prep	PrecSep_0			737006	JTR	EET SL	09/22/25 08:22
Total/NA	Analysis	9320		1	740746	SWS	EET SL	10/15/25 09:55
Total/NA	Analysis	Ra226_Ra228		1	740621	CAH	EET SL	10/15/25 14:25

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

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

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-233162-1
Project/Site: Federal CCR Wells

Laboratory: Eurofins Cleveland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0806	12-31-26
Georgia	State	4062	02-27-26
Illinois	NELAP	200004	08-31-26
Iowa	State	421	06-01-27
Kansas	NELAP	E-10336	01-31-26
Kentucky (UST)	State	112225	02-28-26
Kentucky (WW)	State	KY98016	12-31-25
Minnesota	NELAP	039-999-348	12-31-25
New Hampshire	NELAP	2250	09-30-25
New Jersey	NELAP	OH001	06-30-26
New York	NELAP	10975	04-01-26
North Dakota	State	R-244	02-27-26
Ohio	State	8303	11-04-25
Ohio VAP	State	ORELAP 4062	02-28-26
Oregon	NELAP	4062	02-27-26
Pennsylvania	NELAP	68-00340	08-31-26
Texas	NELAP	T104704517	08-31-26
US Fish & Wildlife	US Federal Programs	A26406	02-28-26
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	09-14-26
West Virginia DEP	State	210	12-31-25
Wisconsin	State	399167560	08-31-26

Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-27
ANAB	Dept. of Defense ELAP	L2305	04-06-27
ANAB	Dept. of Energy	L2305.01	04-06-27
ANAB	ISO/IEC 17025	L2305	04-06-27
Arizona	State	AZ0813	12-08-25
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	07-01-26
Connecticut	State	PH-0241	03-31-27
Florida	NELAP	E87689	06-30-26
HI - RadChem Recognition	State	n/a	06-30-26
Illinois	NELAP	200023	11-30-25
Iowa	State	373	12-01-26
Kansas	NELAP	E-10236	10-31-25
Kentucky (DW)	State	KY90125	12-31-25
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-25
Louisiana (All)	NELAP	106151	06-30-26
Louisiana (DW)	State	LA011	12-31-25
Maryland	State	310	10-01-26
Massachusetts	State	M-MO054	06-30-26
MI - RadChem Recognition	State	9005	06-30-26
Missouri	State	780	06-30-28
Nevada	State	MO00054	07-31-26

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-233162-1
Project/Site: Federal CCR Wells

Laboratory: Eurofins St. Louis (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New Jersey	NELAP	MO002	06-30-26
New Mexico	State	MO00054	06-30-26
New York	NELAP	11616	03-31-26
North Carolina (DW)	State	29700	06-30-26
North Dakota	State	R-207	06-30-25 *
Oklahoma	NELAP	9997	12-31-25
Oregon	NELAP	4157	09-01-26
Pennsylvania	NELAP	68-00540	02-28-26
South Carolina	State	85002	06-30-26
Texas	NELAP	T104704193	07-31-26
US Fish & Wildlife	US Federal Programs	058448	07-31-26
USDA	US Federal Programs	525-23-138-94730	05-18-26
Utah	NELAP	MO00054	07-31-26
Virginia	NELAP	460230	06-14-26
Washington	State	C592	08-31-26
West Virginia DEP	State	381	10-31-25

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

Columbus 209

eurofins Environment Testing

Client Information	Sampler: Bobby Casto	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s):	COC No. 240-111832-39818.1
Client Contact: Taylor Huffman	Phone: (740) 373-4308	E-Mail: roxanne.cisneros@et.eurofinsus.com	State of Origin:	Page: Page 1 of 8
Company: Lightstone Generation Gavin Power LLC	PWSID			Job #:
Address: 7397 OH-7	Due Date Requested:			
City: Cheshire	TAT Requested (days):			
State, Zip: OH, 45620	Compliance Project: Δ Yes Δ No			
Phone: 740-925-3171(Tel)	PO #: 2935505			
Email: taylor.huffman@lightstonegen.com	WO #:			
Project Name: Gavin CCR	Project #: 24019633			
Site:	SSOW#:			

Analysis Requested

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wasteoil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B, 6020, 7470A	2540C_Calcd - TDS	9315_Ra228, 9320_Ra228, Ra226Ra228_GFPC	300.0_28D - Chloride, Fluoride & Sulfate	2320B - (MOD) Alkalinity	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	N	D	N	N		
96154R-F-20250912-01	9-12-25	1157	G	Water			1	1	2	1	1		
2022-05-F-20250912-01	9-12-25	1337	G	Water			1	1	2	1	1		
2022-04-F-20250912-01	9-12-25	1429	G	Water			1	1	2	1	1		
Field Blank-001-F-20250912-01	9-12-25	1520	G	Water			1	1	2	1	1		
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									

240-233162 COC

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
[signature]	9-16-25/0930	Kemron	Ashley McCroskey	9-16-25 1146	Euro
Ashley McCroskey	9-16-25 1700	Euro	Martin	9/17/25 800	Eur

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

Ver: 06/08/2021

Eurofins – Cleveland Sample Receipt Form/Narrative **Login # :** _____
Barberton Facility

Client Lightstone Gavin Site Name _____ Cooler unpacked by: KMartin

Cooler Received on 9/17/25 Opened on 9/17/25

FedEx: 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other _____

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

Eurofins Cooler # EC 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 # 13 (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 1	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# HC567196
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

Labeled by:

Labels Verified 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 # _____

Eurofins - Cleveland Sample Receipt Multiple Cooler Form

Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
(EC) Client Box Other	IR GUN #: 13	0.5	0.7	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #: 1	4.1	4.3	Wet Ice Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #: 1	4.5	4.7	Wet Ice Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #:	0.3	0.5	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
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EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
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EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None

☐ See Temperature Excursion Form

9/17/2025

Login Container Summary Report

240-233162

10/16/2025

Temperature readings _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
96154R-F-20250912-01	240-233162-A-1	Plastic 60 mL - unpreserved				
96154R-F-20250912-01	240-233162-B-1	Plastic 60 mL - unpreserved				
96154R-F-20250912-01	240-233162-C-1	Plastic 500ml - unpreserved				
96154R-F-20250912-01	240-233162-D-1	Plastic 500ml - with Nitric Acid	<2			
96154R-F-20250912-01	240-233162-E-1	Plastic 1 liter - Nitric Acid	<2			
96154R-F-20250912-01	240-233162-F-1	Plastic 1 liter - Nitric Acid	<2			
2022-05-F-20250912-01	240-233162-A 2	Plastic 60 mL - unpreserved				
2022-05-F-20250912-01	240-233162-B-2	Plastic 60 mL - unpreserved				
2022-05-F-20250912-01	240-233162-C-2	Plastic 500ml - unpreserved				
2022-05-F-20250912-01	240-233162-D-2	Plastic 500ml - with Nitric Acid	<2			
2022-05-F-20250912-01	240 233162-E-2	Plastic 1 liter - Nitric Acid	<2			
2022-05-F-20250912-01	240-233162-F-2	Plastic 1 liter - Nitric Acid	<2			
2022-04-F-20250912-01	240 233162-A-3	Plastic 60 mL - unpreserved				
2022-04-F-20250912-01	240-233162-B-3	Plastic 60 mL - unpreserved				
2022-04 F-20250912-01	240-233162-C-3	Plastic 500ml - unpreserved				
2022-04-F-20250912-01	240-233162-D-3	Plastic 500ml - with Nitric Acid	<2			
2022-04 F-20250912-01	240-233162-E-3	Plastic 1 liter - Nitric Acid	<2			
2022-04-F-20250912-01	240-233162-F-3	Plastic 1 liter - Nitric Acid	<2			
FIELD BLANK-001-F-20250912-01	240-233162-A-4	Plastic 60 mL - unpreserved				
FIELD BLANK-001-F-20250912-01	240-233162-B-4	Plastic 60 mL - unpreserved				
FIELD BLANK-001-F-20250912-01	240-233162-C-4	Plastic 500ml - unpreserved				
FIELD BLANK-001-F-20250912-01	240-233162-D-4	Plastic 500ml - with Nitric Acid	<2			
FIELD BLANK-001-F-20250912-01	240-233162-E-4	Plastic 1 liter - Nitric Acid	<2			
FIELD BLANK-001-F 20250912-01	240-233162-F-4	Plastic 1 liter - Nitric Acid	<2			

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s): N/A	COC No: 240-207999.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: roxanne.cisneros@et.eurofinsus.com	State of Origin: Ohio	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): N/A		Job #: 240-233162-1
Address: 13715 Rider Trail North,	Due Date Requested: 10/20/2025			Preservation Codes:
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Federal CCR Wells	Project #: 24019633			
Site: N/A	SSOW#: N/A			Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9320_Ra228/PrecSep_0Radium-228 (GFPC)	9315_Ra228/PrecSep_21Radium-226 (GFPC)	Ra226Ra228_GFPCCombined Radium-226 and Radium-228	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
96154R-F-20250912-01 (240-233162-1)	9/12/25	11.57 Eastern	G	Water			X	X	X	2	
2022-05-F-20250912-01 (240-233162-2)	9/12/25	13:37 Eastern	G	Water			X	X	X	2	
2022-04-F-20250912-01 (240-233162-3)	9/12/25	14:29 Eastern	G	Water			X	X	X	2	
FIELD BLANK-001-F-20250912-01 (240-233162-4)	9/12/25	15:20 Eastern	G	Water			X	X	X	2	

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

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

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
JCollins	9-17-25 1624	EUR			
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:

ICOC No:
240-207999

Containers

Count	Container Type	Preservative
8	Plastic 1 liter - Nitric Acid	Nitric Acid

Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-233162-1

Login Number: 233162
List Number: 2
Creator: Forrest, Cheyenne L

List Source: Eurofins St. Louis
List Creation: 09/18/25 01:17 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?	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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620
Generated 10/16/2025 3:42:56 PM

JOB DESCRIPTION

Federal CCR Wells

JOB NUMBER

240-233163-1

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization

Roxanne Cisneros

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10/16/2025 3:42:56 PM

Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(330)497-9396

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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-233163-1

Qualifiers

Metals

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

General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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: 240-233163-1 — Eurofins Cleveland

Job Narrative
240-233163-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The samples were received on 9/17/2025 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 0.5°C, 0.7°C, 4.3°C and 4.7°C.

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

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

Gas Flow Proportional Counter
Method 9320_Ra228: Radium 228 Batch 737006

The detection goal was not met for the following sample due to a reduced sample volume used in prep attributed to the presence of matrix interferences. 2003-F-20250915-01 (240-233163-4)

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

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

Method Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-233163-1
Project/Site: Federal CCR Wells

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CLE
6020B	Metals (ICP/MS)	SW846	EET CLE
7470A	Mercury (CVAA)	SW846	EET CLE
2320 B-2021	Alkalinity	SM	EET CLE
2540 C-2020	Solids, Total Dissolved (TDS)	SM	EET CLE
300.0	Anions, Ion Chromatography	EPA	EET CLE
9315	Radium 226 by GFPC	SW846	EET SL
9320	Radium-228 (GFPC)	SW846	EET SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	EET SL
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CLE
7470A	Preparation, Mercury	SW846	EET CLE
PrecSep_0	Preparation, Precipitate Separation	None	EET SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	EET SL

Protocol References:

EPA = US Environmental Protection Agency

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:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

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

Sample Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-233163-1
Project/Site: Federal CCR Wells

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
240-233163-1	MW-17-F-20250915-01	Water	09/15/25 10:39	09/17/25 08:00	Ohio
240-233163-2	DUP-002-F-20250915-01	Water	09/15/25 00:00	09/17/25 08:00	Ohio
240-233163-3	9806-F-20250915-01	Water	09/15/25 12:14	09/17/25 08:00	Ohio
240-233163-4	2003-F-20250915-01	Water	09/15/25 13:55	09/17/25 08:00	Ohio
240-233163-5	93108-F-20250915-01	Water	09/15/25 15:11	09/17/25 08:00	Ohio

Detection Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-233163-1

Client Sample ID: MW-17-F-20250915-01 — Lab Sample ID: 240-233163-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	590		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	6.7		5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	250		5.0	0.77	ug/L	1		6020B	Total Recoverable
Calcium	120000		1000	250	ug/L	1		6020B	Total Recoverable
Cobalt	0.65	J	1.0	0.086	ug/L	1		6020B	Total Recoverable
Lithium	95		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	28000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	12		5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	5800		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	2800000		10000	8800	ug/L	10		6020B	Total Recoverable
Total Alkalinity	360	B	5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	360	B	5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	7200		100	78	mg/L	1		2540 C-2020	Total/NA
Chloride	4500		50	6.4	mg/L	50		300.0	Total/NA
Fluoride	1.6		0.25	0.12	mg/L	5		300.0	Total/NA
Sulfate	500		5.0	1.7	mg/L	5		300.0	Total/NA

Client Sample ID: DUP-002-F-20250915-01 — Lab Sample ID: 240-233163-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	560		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	6.1		5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	240		5.0	0.77	ug/L	1		6020B	Total Recoverable
Calcium	110000		1000	250	ug/L	1		6020B	Total Recoverable
Cobalt	0.62	J	1.0	0.086	ug/L	1		6020B	Total Recoverable
Lithium	87		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	24000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	12		5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	5600		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	2800000		10000	8800	ug/L	10		6020B	Total Recoverable
Total Alkalinity	360	B	5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	360	B	5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	7100		100	78	mg/L	1		2540 C-2020	Total/NA
Chloride	5500		100	13	mg/L	100		300.0	Total/NA
Fluoride	1.6		0.25	0.12	mg/L	5		300.0	Total/NA
Sulfate	520		5.0	1.7	mg/L	5		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland

Detection Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-233163-1

Client Sample ID: 9806-F-20250915-01

Lab Sample ID: 240-233163-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	300		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	1.3	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	40		5.0	0.77	ug/L	1		6020B	Total Recoverable
Calcium	3900		1000	250	ug/L	1		6020B	Total Recoverable
Chromium	3.3	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	1.0		1.0	0.086	ug/L	1		6020B	Total Recoverable
Lead	1.1		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	11		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	1200		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	10		5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	1100		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	340000		1000	880	ug/L	1		6020B	Total Recoverable
Mercury	0.15	J	0.20	0.13	ug/L	1		7470A	Total/NA
Total Alkalinity	310	B	5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	280	B	5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Carbonate Alkalinity as CaCO3	27		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	830		20	16	mg/L	1		2540 C-2020	Total/NA
Chloride	210		5.0	0.64	mg/L	5		300.0	Total/NA
Fluoride	1.3		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	120		1.0	0.35	mg/L	1		300.0	Total/NA

Client Sample ID: 2003-F-20250915-01

Lab Sample ID: 240-233163-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	500		100	57	ug/L	1		6010D	Total Recoverable
Antimony	0.58	J	2.0	0.57	ug/L	1		6020B	Total Recoverable
Arsenic	29		5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	140		5.0	0.77	ug/L	1		6020B	Total Recoverable
Beryllium	0.29	J	1.0	0.27	ug/L	1		6020B	Total Recoverable
Calcium	6800		1000	250	ug/L	1		6020B	Total Recoverable
Chromium	11		5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	3.0		1.0	0.086	ug/L	1		6020B	Total Recoverable
Lead	3.2		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	26		8.0	3.4	ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: 2003-F-20250915-01 (Continued)

Lab Sample ID: 240-233163-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	2200		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	130		5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	2700		1000	220	ug/L	1		6020B	Total Recoverable
Selenium	13		5.0	0.89	ug/L	1		6020B	Total Recoverable
Sodium	680000		1000	880	ug/L	1		6020B	Total Recoverable
Mercury	0.14	J	0.20	0.13	ug/L	1		7470A	Total/NA
Total Alkalinity	790	B	5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	770	B	5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Carbonate Alkalinity as CaCO3	25		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	1700		20	16	mg/L	1		2540 C-2020	Total/NA
Chloride	380		10	1.3	mg/L	10		300.0	Total/NA
Fluoride	3.3		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	49		1.0	0.35	mg/L	1		300.0	Total/NA

Client Sample ID: 93108-F-20250915-01

Lab Sample ID: 240-233163-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	420		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	3.9	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	440		5.0	0.77	ug/L	1		6020B	Total Recoverable
Calcium	15000		1000	250	ug/L	1		6020B	Total Recoverable
Lithium	35		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	4300		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	83		5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	2000		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	1300000		5000	4400	ug/L	5		6020B	Total Recoverable
Mercury	0.20		0.20	0.13	ug/L	1		7470A	Total/NA
Total Alkalinity	420	B	5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	420	B	5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	3300		50	39	mg/L	1		2540 C-2020	Total/NA
Chloride	1800		20	2.6	mg/L	20		300.0	Total/NA
Fluoride	3.1		0.25	0.12	mg/L	5		300.0	Total/NA
Sulfate	19		5.0	1.7	mg/L	5		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-17-F-20250915-01
Date Collected: 09/15/25 10:39
Date Received: 09/17/25 08:00

Lab Sample ID: 240-233163-1
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**590**		100	57	ug/L		09/17/25 14:00	09/18/25 16:47	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		09/17/25 14:00	09/18/25 15:35	1
Arsenic	**6.7**		5.0	0.75	ug/L		09/17/25 14:00	09/18/25 15:35	1
Barium	**250**		5.0	0.77	ug/L		09/17/25 14:00	09/18/25 15:35	1
Beryllium	ND		1.0	0.27	ug/L		09/17/25 14:00	09/18/25 15:35	1
Cadmium	ND		1.0	0.077	ug/L		09/17/25 14:00	09/18/25 15:35	1
Calcium	**120000**		1000	250	ug/L		09/17/25 14:00	09/18/25 15:35	1
Chromium	ND		5.0	1.2	ug/L		09/17/25 14:00	09/18/25 15:35	1
Cobalt	**0.65**	**J**	1.0	0.086	ug/L		09/17/25 14:00	09/18/25 15:35	1
Lead	ND		1.0	0.45	ug/L		09/17/25 14:00	09/18/25 15:35	1
Lithium	**95**		8.0	3.4	ug/L		09/17/25 14:00	09/18/25 15:35	1
Magnesium	**28000**		1000	61	ug/L		09/17/25 14:00	09/18/25 15:35	1
Molybdenum	**12**		5.0	1.1	ug/L		09/17/25 14:00	09/18/25 15:35	1
Potassium	**5800**		1000	220	ug/L		09/17/25 14:00	09/18/25 15:35	1
Selenium	ND		5.0	0.89	ug/L		09/17/25 14:00	09/18/25 15:35	1
Sodium	**2800000**		10000	8800	ug/L		09/17/25 14:00	09/19/25 12:58	10
Thallium	ND		1.0	0.51	ug/L		09/17/25 14:00	09/18/25 15:35	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		09/17/25 14:00	09/18/25 12:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	**360**	**B**	5.0	2.6	mg/L			09/18/25 12:37	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**360**	**B**	5.0	2.6	mg/L			09/18/25 12:37	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			09/18/25 12:37	1
Total Dissolved Solids (SM 2540 C-2020)	**7200**		100	78	mg/L			09/17/25 14:46	1
Chloride (EPA 300.0)	**4500**		50	6.4	mg/L			09/18/25 12:43	50
Fluoride (EPA 300.0)	**1.6**		0.25	0.12	mg/L			09/18/25 12:34	5
Sulfate (EPA 300.0)	**500**		5.0	1.7	mg/L			09/18/25 12:34	5

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.653**		0.277	0.283	1.00	0.313	pCi/L	09/22/25 08:15	10/15/25 21:18	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.1*		*30 - 110*	*09/22/25 08:15*	*10/15/25 21:18*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**1.37**		0.475	0.491	1.00	0.578	pCi/L	09/22/25 08:22	10/15/25 09:56	1

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-233163-1

Client Sample ID: MW-17-F-20250915-01
Date Collected: 09/15/25 10:39
Date Received: 09/17/25 08:00

Lab Sample ID: 240-233163-1
Matrix: Water

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	88.1		30 - 110	09/22/25 08:22	10/15/25 09:56	1
Y Carrier	79.3		30 - 110	09/22/25 08:22	10/15/25 09:56	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	2.03		0.550	0.567	5.00	0.578	pCi/L		10/15/25 14:25	1

Client Sample ID: DUP-002-F-20250915-01
Date Collected: 09/15/25 00:00
Date Received: 09/17/25 08:00

Lab Sample ID: 240-233163-2
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**560**		100	57	ug/L		09/17/25 14:00	09/18/25 16:52	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		09/17/25 14:00	09/18/25 15:38	1
Arsenic	**6.1**		5.0	0.75	ug/L		09/17/25 14:00	09/18/25 15:38	1
Barium	**240**		5.0	0.77	ug/L		09/17/25 14:00	09/18/25 15:38	1
Beryllium	ND		1.0	0.27	ug/L		09/17/25 14:00	09/18/25 15:38	1
Cadmium	ND		1.0	0.077	ug/L		09/17/25 14:00	09/18/25 15:38	1
Calcium	**110000**		1000	250	ug/L		09/17/25 14:00	09/18/25 15:38	1
Chromium	ND		5.0	1.2	ug/L		09/17/25 14:00	09/18/25 15:38	1
Cobalt	**0.62**	**J**	1.0	0.086	ug/L		09/17/25 14:00	09/18/25 15:38	1
Lead	ND		1.0	0.45	ug/L		09/17/25 14:00	09/18/25 15:38	1
Lithium	**87**		8.0	3.4	ug/L		09/17/25 14:00	09/18/25 15:38	1
Magnesium	**24000**		1000	61	ug/L		09/17/25 14:00	09/18/25 15:38	1
Molybdenum	**12**		5.0	1.1	ug/L		09/17/25 14:00	09/18/25 15:38	1
Potassium	**5600**		1000	220	ug/L		09/17/25 14:00	09/18/25 15:38	1
Selenium	ND		5.0	0.89	ug/L		09/17/25 14:00	09/18/25 15:38	1
Sodium	**2800000**		10000	8800	ug/L		09/17/25 14:00	09/19/25 13:01	10
Thallium	ND		1.0	0.51	ug/L		09/17/25 14:00	09/18/25 15:38	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		09/17/25 14:00	09/18/25 12:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	**360**	**B**	5.0	2.6	mg/L			09/18/25 12:53	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**360**	**B**	5.0	2.6	mg/L			09/18/25 12:53	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			09/18/25 12:53	1
Total Dissolved Solids (SM 2540 C-2020)	**7100**		100	78	mg/L			09/17/25 14:46	1
Chloride (EPA 300.0)	**5500**		100	13	mg/L			09/19/25 15:28	100
Fluoride (EPA 300.0)	**1.6**		0.25	0.12	mg/L			09/18/25 12:52	5
Sulfate (EPA 300.0)	**520**		5.0	1.7	mg/L			09/18/25 12:52	5

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.369**		0.240	0.243	1.00	0.336	pCi/L	09/22/25 08:15	10/15/25 21:12	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.8*		*30 - 110*	*09/22/25 08:15*	*10/15/25 21:12*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**1.15**		0.411	0.425	1.00	0.474	pCi/L	09/22/25 08:22	10/15/25 09:55	1

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-233163-1

Client Sample ID: DUP-002-F-20250915-01
Date Collected: 09/15/25 00:00
Date Received: 09/17/25 08:00

Lab Sample ID: 240-233163-2
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.8*		*30 - 110*	*09/22/25 08:22*	*10/15/25 09:55*	*1*
Y Carrier	*77.8*		*30 - 110*	*09/22/25 08:22*	*10/15/25 09:55*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**1.52**		0.476	0.490	5.00	0.474	pCi/L		10/15/25 14:25	1

Client Sample ID: 9806-F-20250915-01
Date Collected: 09/15/25 12:14
Date Received: 09/17/25 08:00

Lab Sample ID: 240-233163-3
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	300		100	57	ug/L		09/17/25 14:00	09/18/25 17:04	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		09/17/25 14:00	09/18/25 15:41	1
Arsenic	1.3	J	5.0	0.75	ug/L		09/17/25 14:00	09/18/25 15:41	1
Barium	40		5.0	0.77	ug/L		09/17/25 14:00	09/18/25 15:41	1
Beryllium	ND		1.0	0.27	ug/L		09/17/25 14:00	09/18/25 15:41	1
Cadmium	ND		1.0	0.077	ug/L		09/17/25 14:00	09/18/25 15:41	1
Calcium	3900		1000	250	ug/L		09/17/25 14:00	09/18/25 15:41	1
Chromium	3.3	J	5.0	1.2	ug/L		09/17/25 14:00	09/18/25 15:41	1
Cobalt	1.0		1.0	0.086	ug/L		09/17/25 14:00	09/18/25 15:41	1
Lead	1.1		1.0	0.45	ug/L		09/17/25 14:00	09/18/25 15:41	1
Lithium	11		8.0	3.4	ug/L		09/17/25 14:00	09/18/25 15:41	1
Magnesium	1200		1000	61	ug/L		09/17/25 14:00	09/18/25 15:41	1
Molybdenum	10		5.0	1.1	ug/L		09/17/25 14:00	09/18/25 15:41	1
Potassium	1100		1000	220	ug/L		09/17/25 14:00	09/18/25 15:41	1
Selenium	ND		5.0	0.89	ug/L		09/17/25 14:00	09/18/25 15:41	1
Sodium	340000		1000	880	ug/L		09/17/25 14:00	09/18/25 15:41	1
Thallium	ND		1.0	0.51	ug/L		09/17/25 14:00	09/18/25 15:41	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.15	J	0.20	0.13	ug/L		09/17/25 14:00	09/18/25 12:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	310	B	5.0	2.6	mg/L			09/18/25 13:02	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	280	B	5.0	2.6	mg/L			09/18/25 13:02	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	27		5.0	2.6	mg/L			09/18/25 13:02	1
Total Dissolved Solids (SM 2540 C-2020)	830		20	16	mg/L			09/17/25 14:46	1
Chloride (EPA 300.0)	210		5.0	0.64	mg/L			09/18/25 13:52	5
Fluoride (EPA 300.0)	1.3		0.050	0.024	mg/L			09/18/25 13:44	1
Sulfate (EPA 300.0)	120		1.0	0.35	mg/L			09/18/25 13:44	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.230	U	0.184	0.185	1.00	0.266	pCi/L	09/22/25 08:15	10/15/25 21:14	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.9*		*30 - 110*	*09/22/25 08:15*	*10/15/25 21:14*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.788		0.488	0.493	1.00	0.726	pCi/L	09/22/25 08:22	10/15/25 09:55	1

Client Sample ID: 9806-F-20250915-01
Date Collected: 09/15/25 12:14
Date Received: 09/17/25 08:00

Lab Sample ID: 240-233163-3
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.9*		*30 - 110*	*09/22/25 08:22*	*10/15/25 09:55*	*1*
Y Carrier	*70.3*		*30 - 110*	*09/22/25 08:22*	*10/15/25 09:55*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**1.02**		0.522	0.527	5.00	0.726	pCi/L		10/16/25 14:36	1

Client Sample ID: 2003-F-20250915-01
Date Collected: 09/15/25 13:55
Date Received: 09/17/25 08:00

Lab Sample ID: 240-233163-4
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	500		100	57	ug/L		09/17/25 14:00	09/18/25 17:09	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.58	J	2.0	0.57	ug/L		09/17/25 14:00	09/18/25 15:43	1
Arsenic	29		5.0	0.75	ug/L		09/17/25 14:00	09/18/25 15:43	1
Barium	140		5.0	0.77	ug/L		09/17/25 14:00	09/18/25 15:43	1
Beryllium	0.29	J	1.0	0.27	ug/L		09/17/25 14:00	09/18/25 15:43	1
Cadmium	ND		1.0	0.077	ug/L		09/17/25 14:00	09/18/25 15:43	1
Calcium	6800		1000	250	ug/L		09/17/25 14:00	09/18/25 15:43	1
Chromium	11		5.0	1.2	ug/L		09/17/25 14:00	09/18/25 15:43	1
Cobalt	3.0		1.0	0.086	ug/L		09/17/25 14:00	09/18/25 15:43	1
Lead	3.2		1.0	0.45	ug/L		09/17/25 14:00	09/18/25 15:43	1
Lithium	26		8.0	3.4	ug/L		09/17/25 14:00	09/18/25 15:43	1
Magnesium	2200		1000	61	ug/L		09/17/25 14:00	09/18/25 15:43	1
Molybdenum	130		5.0	1.1	ug/L		09/17/25 14:00	09/18/25 15:43	1
Potassium	2700		1000	220	ug/L		09/17/25 14:00	09/18/25 15:43	1
Selenium	13		5.0	0.89	ug/L		09/17/25 14:00	09/18/25 15:43	1
Sodium	680000		1000	880	ug/L		09/17/25 14:00	09/18/25 15:43	1
Thallium	ND		1.0	0.51	ug/L		09/17/25 14:00	09/18/25 15:43	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.14	J	0.20	0.13	ug/L		09/17/25 14:00	09/18/25 12:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	790	B	5.0	2.6	mg/L			09/18/25 13:10	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	770	B	5.0	2.6	mg/L			09/18/25 13:10	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	25		5.0	2.6	mg/L			09/18/25 13:10	1
Total Dissolved Solids (SM 2540 C-2020)	1700		20	16	mg/L			09/17/25 14:46	1
Chloride (EPA 300.0)	380		10	1.3	mg/L			09/18/25 14:27	10
Fluoride (EPA 300.0)	3.3		0.050	0.024	mg/L			09/18/25 14:18	1
Sulfate (EPA 300.0)	49		1.0	0.35	mg/L			09/18/25 14:18	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0720	U	0.287	0.287	1.00	0.654	pCi/L	09/22/25 08:15	10/15/25 21:14	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*69.5*		*30 - 110*	*09/22/25 08:15*	*10/15/25 21:14*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	3.66	G	1.36	1.40	1.00	1.74	pCi/L	09/22/25 08:22	10/15/25 09:54	1

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-233163-1

Client Sample ID: 2003-F-20250915-01
Date Collected: 09/15/25 13:55
Date Received: 09/17/25 08:00

Lab Sample ID: 240-233163-4
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*69.5*		*30 - 110*	*09/22/25 08:22*	*10/15/25 09:54*	*1*
Y Carrier	*70.7*		*30 - 110*	*09/22/25 08:22*	*10/15/25 09:54*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**3.59**		1.39	1.43	5.00	1.74	pCi/L		10/16/25 14:36	1

Client Sample ID: 93108-F-20250915-01
Date Collected: 09/15/25 15:11
Date Received: 09/17/25 08:00

Lab Sample ID: 240-233163-5
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	420		100	57	ug/L		09/17/25 14:00	09/18/25 17:13	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		09/17/25 14:00	09/18/25 15:46	1
Arsenic	3.9	J	5.0	0.75	ug/L		09/17/25 14:00	09/18/25 15:46	1
Barium	440		5.0	0.77	ug/L		09/17/25 14:00	09/18/25 15:46	1
Beryllium	ND		1.0	0.27	ug/L		09/17/25 14:00	09/18/25 15:46	1
Cadmium	ND		1.0	0.077	ug/L		09/17/25 14:00	09/18/25 15:46	1
Calcium	15000		1000	250	ug/L		09/17/25 14:00	09/18/25 15:46	1
Chromium	ND		5.0	1.2	ug/L		09/17/25 14:00	09/18/25 15:46	1
Cobalt	ND		1.0	0.086	ug/L		09/17/25 14:00	09/18/25 15:46	1
Lead	ND		1.0	0.45	ug/L		09/17/25 14:00	09/18/25 15:46	1
Lithium	35		8.0	3.4	ug/L		09/17/25 14:00	09/18/25 15:46	1
Magnesium	4300		1000	61	ug/L		09/17/25 14:00	09/18/25 15:46	1
Molybdenum	83		5.0	1.1	ug/L		09/17/25 14:00	09/18/25 15:46	1
Potassium	2000		1000	220	ug/L		09/17/25 14:00	09/18/25 15:46	1
Selenium	ND		5.0	0.89	ug/L		09/17/25 14:00	09/18/25 15:46	1
Sodium	1300000		5000	4400	ug/L		09/17/25 14:00	09/19/25 13:03	5
Thallium	ND		1.0	0.51	ug/L		09/17/25 14:00	09/18/25 15:46	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20		0.20	0.13	ug/L		09/17/25 14:00	09/18/25 12:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	420	B	5.0	2.6	mg/L			09/18/25 13:21	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	420	B	5.0	2.6	mg/L			09/18/25 13:21	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			09/18/25 13:21	1
Total Dissolved Solids (SM 2540 C-2020)	3300		50	39	mg/L			09/17/25 14:46	1
Chloride (EPA 300.0)	1800		20	2.6	mg/L			09/18/25 14:44	20
Fluoride (EPA 300.0)	3.1		0.25	0.12	mg/L			09/18/25 14:36	5
Sulfate (EPA 300.0)	19		5.0	1.7	mg/L			09/18/25 14:36	5

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.617		0.266	0.272	1.00	0.309	pCi/L	09/22/25 08:15	10/15/25 21:14	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.4*		*30 - 110*	*09/22/25 08:15*	*10/15/25 21:14*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.43		0.481	0.499	1.00	0.576	pCi/L	09/22/25 08:22	10/15/25 09:54	1

Client Sample ID: 93108-F-20250915-01
Date Collected: 09/15/25 15:11
Date Received: 09/17/25 08:00

Lab Sample ID: 240-233163-5
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.4*		*30 - 110*	*09/22/25 08:22*	*10/15/25 09:54*	*1*
Y Carrier	*73.6*		*30 - 110*	*09/22/25 08:22*	*10/15/25 09:54*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**2.05**		0.550	0.568	5.00	0.576	pCi/L		10/16/25 14:36	1

Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-233163-1

Method: 9315 - Radium 226 by GFPC

Matrix: Water **Prep Type: Total/NA**

		Percent Yield (Acceptance Limits)
		Ba
Lab Sample ID	Client Sample ID	(30-110)
240-233163-1	MW-17-F-20250915-01	88.1
240-233163-2	DUP-002-F-20250915-01	87.8
240-233163-3	9806-F-20250915-01	90.9
240-233163-4	2003-F-20250915-01	69.5
240-233163-5	93108-F-20250915-01	93.4
LCS 160-737004/2-A	Lab Control Sample	94.4
MB 160-737004/1-A	Method Blank	95.7

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	(30-110)	(30-110)
240-233163-1	MW-17-F-20250915-01	88.1	79.3
240-233163-2	DUP-002-F-20250915-01	87.8	77.8
240-233163-3	9806-F-20250915-01	90.9	70.3
240-233163-4	2003-F-20250915-01	69.5	70.7
240-233163-5	93108-F-20250915-01	93.4	73.6
LCS 160-737006/2-A	Lab Control Sample	94.4	82.6
MB 160-737006/1-A	Method Blank	95.7	83.4

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-672064/1-A
Matrix: Water
Analysis Batch: 672329

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 672064

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		09/17/25 14:00	09/18/25 15:22	1

Lab Sample ID: LCS 240-672064/2-A
Matrix: Water
Analysis Batch: 672329

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 672064

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1000	1070		ug/L		107	80 - 120

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-672064/1-A
Matrix: Water
Analysis Batch: 672347

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 672064

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		09/17/25 14:00	09/18/25 14:37	1
Arsenic	ND		5.0	0.75	ug/L		09/17/25 14:00	09/18/25 14:37	1
Barium	ND		5.0	0.77	ug/L		09/17/25 14:00	09/18/25 14:37	1
Beryllium	ND		1.0	0.27	ug/L		09/17/25 14:00	09/18/25 14:37	1
Cadmium	ND		1.0	0.077	ug/L		09/17/25 14:00	09/18/25 14:37	1
Calcium	ND		1000	250	ug/L		09/17/25 14:00	09/18/25 14:37	1
Chromium	ND		5.0	1.2	ug/L		09/17/25 14:00	09/18/25 14:37	1
Cobalt	ND		1.0	0.086	ug/L		09/17/25 14:00	09/18/25 14:37	1
Lead	ND		1.0	0.45	ug/L		09/17/25 14:00	09/18/25 14:37	1
Lithium	ND		8.0	3.4	ug/L		09/17/25 14:00	09/18/25 14:37	1
Magnesium	ND		1000	61	ug/L		09/17/25 14:00	09/18/25 14:37	1
Molybdenum	ND		5.0	1.1	ug/L		09/17/25 14:00	09/18/25 14:37	1
Potassium	ND		1000	220	ug/L		09/17/25 14:00	09/18/25 14:37	1
Selenium	ND		5.0	0.89	ug/L		09/17/25 14:00	09/18/25 14:37	1
Sodium	ND		1000	880	ug/L		09/17/25 14:00	09/18/25 14:37	1
Thallium	ND		1.0	0.51	ug/L		09/17/25 14:00	09/18/25 14:37	1

Lab Sample ID: LCS 240-672064/3-A
Matrix: Water
Analysis Batch: 672347

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 672064

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	97.3		ug/L		97	80 - 120
Arsenic	1000	976		ug/L		98	80 - 120
Barium	1000	955		ug/L		96	80 - 120
Beryllium	500	493		ug/L		99	80 - 120
Cadmium	500	476		ug/L		95	80 - 120
Calcium	25000	24600		ug/L		98	80 - 120
Chromium	500	496		ug/L		99	80 - 120
Cobalt	500	479		ug/L		96	80 - 120
Lead	500	543		ug/L		109	80 - 120
Lithium	500	493		ug/L		99	80 - 120
Magnesium	25000	24800		ug/L		99	80 - 120

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

Lab Sample ID: LCS 240-672064/3-A
Matrix: Water
Analysis Batch: 672347

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 672064

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Molybdenum	500	489		ug/L		98	80 - 120
Potassium	25000	24900		ug/L		100	80 - 120
Selenium	1000	983		ug/L		98	80 - 120
Sodium	25000	24900		ug/L		100	80 - 120
Thallium	1000	1130		ug/L		113	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-672069/1-A
Matrix: Water
Analysis Batch: 672304

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 672069

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		09/17/25 14:00	09/18/25 11:54	1

Lab Sample ID: LCS 240-672069/2-A
Matrix: Water
Analysis Batch: 672304

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 672069

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	4.37		ug/L		87	80 - 120

Method: 2320 B-2021 - Alkalinity

Lab Sample ID: MB 240-672415/4
Matrix: Water
Analysis Batch: 672415

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	3.64	J	5.0	2.6	mg/L			09/18/25 11:27	1
Bicarbonate Alkalinity as CaCO3	3.64	J	5.0	2.6	mg/L			09/18/25 11:27	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			09/18/25 11:27	1

Lab Sample ID: LCS 240-672415/3
Matrix: Water
Analysis Batch: 672415

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	280	260		mg/L		93	86 - 123

Lab Sample ID: 240-233163-1 DU
Matrix: Water
Analysis Batch: 672415

Client Sample ID: MW-17-F-20250915-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity	360	B	361		mg/L		0.8	20
Bicarbonate Alkalinity as CaCO3	360	B	361		mg/L		0.8	20
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

Method: 2540 C-2020 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 240-672121/1
Matrix: Water
Analysis Batch: 672121

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	ND		10	7.8	mg/L			09/17/25 14:46	1

Lab Sample ID: LCS 240-672121/2
Matrix: Water
Analysis Batch: 672121

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	176	150		mg/L		85	80 - 120

Lab Sample ID: 240-233163-4 DU
Matrix: Water
Analysis Batch: 672121

Client Sample ID: 2003-F-20250915-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	1700		1740		mg/L		0.6	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-672091/3
Matrix: Water
Analysis Batch: 672091

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.13	mg/L			09/18/25 09:06	1
Fluoride	ND		0.050	0.024	mg/L			09/18/25 09:06	1
Sulfate	ND		1.0	0.35	mg/L			09/18/25 09:06	1

Lab Sample ID: LCS 240-672091/4
Matrix: Water
Analysis Batch: 672091

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	49.2		mg/L		98	90 - 110
Fluoride	2.50	2.52		mg/L		101	90 - 110
Sulfate	50.0	48.9		mg/L		98	90 - 110

Lab Sample ID: 240-233163-2 MS
Matrix: Water
Analysis Batch: 672091

Client Sample ID: DUP-002-F-20250915-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	1.6		12.5	14.2		mg/L		101	80 - 120
Sulfate	520		250	728		mg/L		82	80 - 120

Lab Sample ID: 240-233163-2 MSD
Matrix: Water
Analysis Batch: 672091

Client Sample ID: DUP-002-F-20250915-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluoride	1.6		12.5	14.2		mg/L		101	80 - 120	0	15

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 240-233163-2 MSD
Matrix: Water
Analysis Batch: 672091

Client Sample ID: DUP-002-F-20250915-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfate	520		250	725		mg/L		81	80 - 120	0	15

Lab Sample ID: MB 240-672452/3
Matrix: Water
Analysis Batch: 672452

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.13	mg/L			09/19/25 14:01	1
Fluoride	ND		0.050	0.024	mg/L			09/19/25 14:01	1
Sulfate	ND		1.0	0.35	mg/L			09/19/25 14:01	1

Lab Sample ID: LCS 240-672452/4
Matrix: Water
Analysis Batch: 672452

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	49.3		mg/L		99	90 - 110
Fluoride	2.50	2.52		mg/L		101	90 - 110
Sulfate	50.0	49.1		mg/L		98	90 - 110

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-737004/1-A
Matrix: Water
Analysis Batch: 740742

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 737004

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.006063	U	0.127	0.127	1.00	0.273	pCi/L	09/22/25 08:15	10/15/25 17:15	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*95.7*		*30 - 110*	*09/22/25 08:15*	*10/15/25 17:15*	*1*

Lab Sample ID: LCS 160-737004/2-A
Matrix: Water
Analysis Batch: 740742

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 737004

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226	9.57	7.474		1.04	1.00	0.276	pCi/L	78	75 - 125

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*94.4*		*30 - 110*

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-233163-1

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-737006/1-A
Matrix: Water
Analysis Batch: 740746

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 737006

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.5003	U	0.349	0.352	1.00	0.531	pCi/L	09/22/25 08:22	10/15/25 09:54	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*95.7*		*30 - 110*	*09/22/25 08:22*	*10/15/25 09:54*	*1*
Y Carrier	*83.4*		*30 - 110*	*09/22/25 08:22*	*10/15/25 09:54*	*1*

Lab Sample ID: LCS 160-737006/2-A
Matrix: Water
Analysis Batch: 740746

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 737006

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228			8.01	8.001		1.13	1.00	0.532	pCi/L	100	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*94.4*		*30 - 110*
Y Carrier	*82.6*		*30 - 110*

Metals

Prep Batch: 672064

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233163-1	MW-17-F-20250915-01	Total Recoverable	Water	3005A	
240-233163-2	DUP-002-F-20250915-01	Total Recoverable	Water	3005A	
240-233163-3	9806-F-20250915-01	Total Recoverable	Water	3005A	
240-233163-4	2003-F-20250915-01	Total Recoverable	Water	3005A	
240-233163-5	93108-F-20250915-01	Total Recoverable	Water	3005A	
MB 240-672064/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-672064/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-672064/3-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 672069

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233163-1	MW-17-F-20250915-01	Total/NA	Water	7470A	
240-233163-2	DUP-002-F-20250915-01	Total/NA	Water	7470A	
240-233163-3	9806-F-20250915-01	Total/NA	Water	7470A	
240-233163-4	2003-F-20250915-01	Total/NA	Water	7470A	
240-233163-5	93108-F-20250915-01	Total/NA	Water	7470A	
MB 240-672069/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-672069/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 672304

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233163-1	MW-17-F-20250915-01	Total/NA	Water	7470A	672069
240-233163-2	DUP-002-F-20250915-01	Total/NA	Water	7470A	672069
240-233163-3	9806-F-20250915-01	Total/NA	Water	7470A	672069
240-233163-4	2003-F-20250915-01	Total/NA	Water	7470A	672069
240-233163-5	93108-F-20250915-01	Total/NA	Water	7470A	672069
MB 240-672069/1-A	Method Blank	Total/NA	Water	7470A	672069
LCS 240-672069/2-A	Lab Control Sample	Total/NA	Water	7470A	672069

Analysis Batch: 672329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233163-1	MW-17-F-20250915-01	Total Recoverable	Water	6010D	672064
240-233163-2	DUP-002-F-20250915-01	Total Recoverable	Water	6010D	672064
240-233163-3	9806-F-20250915-01	Total Recoverable	Water	6010D	672064
240-233163-4	2003-F-20250915-01	Total Recoverable	Water	6010D	672064
240-233163-5	93108-F-20250915-01	Total Recoverable	Water	6010D	672064
MB 240-672064/1-A	Method Blank	Total Recoverable	Water	6010D	672064
LCS 240-672064/2-A	Lab Control Sample	Total Recoverable	Water	6010D	672064

Analysis Batch: 672347

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233163-1	MW-17-F-20250915-01	Total Recoverable	Water	6020B	672064
240-233163-2	DUP-002-F-20250915-01	Total Recoverable	Water	6020B	672064
240-233163-3	9806-F-20250915-01	Total Recoverable	Water	6020B	672064
240-233163-4	2003-F-20250915-01	Total Recoverable	Water	6020B	672064
240-233163-5	93108-F-20250915-01	Total Recoverable	Water	6020B	672064
MB 240-672064/1-A	Method Blank	Total Recoverable	Water	6020B	672064
LCS 240-672064/3-A	Lab Control Sample	Total Recoverable	Water	6020B	672064

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-233163-1

Metals

Analysis Batch: 672406

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233163-1	MW-17-F-20250915-01	Total Recoverable	Water	6020B	672064
240-233163-2	DUP-002-F-20250915-01	Total Recoverable	Water	6020B	672064
240-233163-5	93108-F-20250915-01	Total Recoverable	Water	6020B	672064

General Chemistry

Analysis Batch: 672091

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233163-1	MW-17-F-20250915-01	Total/NA	Water	300.0	
240-233163-1	MW-17-F-20250915-01	Total/NA	Water	300.0	
240-233163-2	DUP-002-F-20250915-01	Total/NA	Water	300.0	
240-233163-3	9806-F-20250915-01	Total/NA	Water	300.0	
240-233163-3	9806-F-20250915-01	Total/NA	Water	300.0	
240-233163-4	2003-F-20250915-01	Total/NA	Water	300.0	
240-233163-4	2003-F-20250915-01	Total/NA	Water	300.0	
240-233163-5	93108-F-20250915-01	Total/NA	Water	300.0	
240-233163-5	93108-F-20250915-01	Total/NA	Water	300.0	
MB 240-672091/3	Method Blank	Total/NA	Water	300.0	
LCS 240-672091/4	Lab Control Sample	Total/NA	Water	300.0	
240-233163-2 MS	DUP-002-F-20250915-01	Total/NA	Water	300.0	
240-233163-2 MSD	DUP-002-F-20250915-01	Total/NA	Water	300.0	

Analysis Batch: 672121

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233163-1	MW-17-F-20250915-01	Total/NA	Water	2540 C-2020	
240-233163-2	DUP-002-F-20250915-01	Total/NA	Water	2540 C-2020	
240-233163-3	9806-F-20250915-01	Total/NA	Water	2540 C-2020	
240-233163-4	2003-F-20250915-01	Total/NA	Water	2540 C-2020	
240-233163-5	93108-F-20250915-01	Total/NA	Water	2540 C-2020	
MB 240-672121/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-672121/2	Lab Control Sample	Total/NA	Water	2540 C-2020	
240-233163-4 DU	2003-F-20250915-01	Total/NA	Water	2540 C-2020	

Analysis Batch: 672415

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233163-1	MW-17-F-20250915-01	Total/NA	Water	2320 B-2021	
240-233163-2	DUP-002-F-20250915-01	Total/NA	Water	2320 B-2021	
240-233163-3	9806-F-20250915-01	Total/NA	Water	2320 B-2021	
240-233163-4	2003-F-20250915-01	Total/NA	Water	2320 B-2021	
240-233163-5	93108-F-20250915-01	Total/NA	Water	2320 B-2021	
MB 240-672415/4	Method Blank	Total/NA	Water	2320 B-2021	
LCS 240-672415/3	Lab Control Sample	Total/NA	Water	2320 B-2021	
240-233163-1 DU	MW-17-F-20250915-01	Total/NA	Water	2320 B-2021	

Analysis Batch: 672452

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233163-2	DUP-002-F-20250915-01	Total/NA	Water	300.0	
MB 240-672452/3	Method Blank	Total/NA	Water	300.0	
LCS 240-672452/4	Lab Control Sample	Total/NA	Water	300.0	

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-233163-1
Project/Site: Federal CCR Wells

Rad

Prep Batch: 737004

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233163-1	MW-17-F-20250915-01	Total/NA	Water	PrecSep-21	
240-233163-2	DUP-002-F-20250915-01	Total/NA	Water	PrecSep-21	
240-233163-3	9806-F-20250915-01	Total/NA	Water	PrecSep-21	
240-233163-4	2003-F-20250915-01	Total/NA	Water	PrecSep-21	
240-233163-5	93108-F-20250915-01	Total/NA	Water	PrecSep-21	
MB 160-737004/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-737004/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 737006

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233163-1	MW-17-F-20250915-01	Total/NA	Water	PrecSep_0	
240-233163-2	DUP-002-F-20250915-01	Total/NA	Water	PrecSep_0	
240-233163-3	9806-F-20250915-01	Total/NA	Water	PrecSep_0	
240-233163-4	2003-F-20250915-01	Total/NA	Water	PrecSep_0	
240-233163-5	93108-F-20250915-01	Total/NA	Water	PrecSep_0	
MB 160-737006/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-737006/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Client Sample ID: MW-17-F-20250915-01

Lab Sample ID: 240-233163-1

Date Collected: 09/15/25 10:39

Matrix: Water

Date Received: 09/17/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			672064	F3PF	EET CLE	09/17/25 14:00
Total Recoverable	Analysis	6010D		1	672329	AJC	EET CLE	09/18/25 16:47
Total Recoverable	Prep	3005A			672064	F3PF	EET CLE	09/17/25 14:00
Total Recoverable	Analysis	6020B		1	672347	S4FJ	EET CLE	09/18/25 15:35
Total Recoverable	Prep	3005A			672064	F3PF	EET CLE	09/17/25 14:00
Total Recoverable	Analysis	6020B		10	672406	RKT	EET CLE	09/19/25 12:58
Total/NA	Prep	7470A			672069	F3PF	EET CLE	09/17/25 14:00
Total/NA	Analysis	7470A		1	672304	GEV	EET CLE	09/18/25 12:25
Total/NA	Analysis	2320 B-2021		1	672415	JMR	EET CLE	09/18/25 12:37
Total/NA	Analysis	2540 C-2020		1	672121	C5SV	EET CLE	09/17/25 14:46
Total/NA	Analysis	300.0		5	672091	JMR	EET CLE	09/18/25 12:34
Total/NA	Analysis	300.0		50	672091	JMR	EET CLE	09/18/25 12:43
Total/NA	Prep	PrecSep-21			737004	JTR	EET SL	09/22/25 08:15
Total/NA	Analysis	9315		1	740746	SWS	EET SL	10/15/25 21:18
Total/NA	Prep	PrecSep_0			737006	JTR	EET SL	09/22/25 08:22
Total/NA	Analysis	9320		1	740742	SWS	EET SL	10/15/25 09:56
Total/NA	Analysis	Ra226_Ra228		1	740621	CAH	EET SL	10/15/25 14:25

Client Sample ID: DUP-002-F-20250915-01

Lab Sample ID: 240-233163-2

Date Collected: 09/15/25 00:00

Matrix: Water

Date Received: 09/17/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			672064	F3PF	EET CLE	09/17/25 14:00
Total Recoverable	Analysis	6010D		1	672329	AJC	EET CLE	09/18/25 16:52
Total Recoverable	Prep	3005A			672064	F3PF	EET CLE	09/17/25 14:00
Total Recoverable	Analysis	6020B		1	672347	S4FJ	EET CLE	09/18/25 15:38
Total Recoverable	Prep	3005A			672064	F3PF	EET CLE	09/17/25 14:00
Total Recoverable	Analysis	6020B		10	672406	RKT	EET CLE	09/19/25 13:01
Total/NA	Prep	7470A			672069	F3PF	EET CLE	09/17/25 14:00
Total/NA	Analysis	7470A		1	672304	GEV	EET CLE	09/18/25 12:27
Total/NA	Analysis	2320 B-2021		1	672415	JMR	EET CLE	09/18/25 12:53
Total/NA	Analysis	2540 C-2020		1	672121	C5SV	EET CLE	09/17/25 14:46
Total/NA	Analysis	300.0		5	672091	JMR	EET CLE	09/18/25 12:52
Total/NA	Analysis	300.0		100	672452	JMR	EET CLE	09/19/25 15:28
Total/NA	Prep	PrecSep-21			737004	JTR	EET SL	09/22/25 08:15
Total/NA	Analysis	9315		1	740742	SWS	EET SL	10/15/25 21:12
Total/NA	Prep	PrecSep_0			737006	JTR	EET SL	09/22/25 08:22
Total/NA	Analysis	9320		1	740746	SWS	EET SL	10/15/25 09:55
Total/NA	Analysis	Ra226_Ra228		1	740621	CAH	EET SL	10/15/25 14:25

Client Sample ID: 9806-F-20250915-01
Lab Sample ID: 240-233163-3

Date Collected: 09/15/25 12:14
Matrix: Water
Date Received: 09/17/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			672064	F3PF	EET CLE	09/17/25 14:00
Total Recoverable	Analysis	6010D		1	672329	AJC	EET CLE	09/18/25 17:04
Total Recoverable	Prep	3005A			672064	F3PF	EET CLE	09/17/25 14:00
Total Recoverable	Analysis	6020B		1	672347	S4FJ	EET CLE	09/18/25 15:41
Total/NA	Prep	7470A			672069	F3PF	EET CLE	09/17/25 14:00
Total/NA	Analysis	7470A		1	672304	GEV	EET CLE	09/18/25 12:28
Total/NA	Analysis	2320 B-2021		1	672415	JMR	EET CLE	09/18/25 13:02
Total/NA	Analysis	2540 C-2020		1	672121	C5SV	EET CLE	09/17/25 14:46
Total/NA	Analysis	300.0		1	672091	JMR	EET CLE	09/18/25 13:44
Total/NA	Analysis	300.0		5	672091	JMR	EET CLE	09/18/25 13:52
Total/NA	Prep	PrecSep-21			737004	JTR	EET SL	09/22/25 08:15
Total/NA	Analysis	9315		1	740742	SWS	EET SL	10/15/25 21:14
Total/NA	Prep	PrecSep_0			737006	JTR	EET SL	09/22/25 08:22
Total/NA	Analysis	9320		1	740746	SWS	EET SL	10/15/25 09:55
Total/NA	Analysis	Ra226_Ra228		1	740621	CAH	EET SL	10/16/25 14:36

Client Sample ID: 2003-F-20250915-01
Lab Sample ID: 240-233163-4

Date Collected: 09/15/25 13:55
Matrix: Water
Date Received: 09/17/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			672064	F3PF	EET CLE	09/17/25 14:00
Total Recoverable	Analysis	6010D		1	672329	AJC	EET CLE	09/18/25 17:09
Total Recoverable	Prep	3005A			672064	F3PF	EET CLE	09/17/25 14:00
Total Recoverable	Analysis	6020B		1	672347	S4FJ	EET CLE	09/18/25 15:43
Total/NA	Prep	7470A			672069	F3PF	EET CLE	09/17/25 14:00
Total/NA	Analysis	7470A		1	672304	GEV	EET CLE	09/18/25 12:30
Total/NA	Analysis	2320 B-2021		1	672415	JMR	EET CLE	09/18/25 13:10
Total/NA	Analysis	2540 C-2020		1	672121	C5SV	EET CLE	09/17/25 14:46
Total/NA	Analysis	300.0		1	672091	JMR	EET CLE	09/18/25 14:18
Total/NA	Analysis	300.0		10	672091	JMR	EET CLE	09/18/25 14:27
Total/NA	Prep	PrecSep-21			737004	JTR	EET SL	09/22/25 08:15
Total/NA	Analysis	9315		1	740742	SWS	EET SL	10/15/25 21:14
Total/NA	Prep	PrecSep_0			737006	JTR	EET SL	09/22/25 08:22
Total/NA	Analysis	9320		1	740742	SWS	EET SL	10/15/25 09:54
Total/NA	Analysis	Ra226_Ra228		1	740621	CAH	EET SL	10/16/25 14:36

Client Sample ID: 93108-F-20250915-01
Lab Sample ID: 240-233163-5

Date Collected: 09/15/25 15:11
Matrix: Water
Date Received: 09/17/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			672064	F3PF	EET CLE	09/17/25 14:00
Total Recoverable	Analysis	6010D		1	672329	AJC	EET CLE	09/18/25 17:13

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-233163-1

Client Sample ID: 93108-F-20250915-01

Date Collected: 09/15/25 15:11
Date Received: 09/17/25 08:00

Lab Sample ID: 240-233163-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			672064	F3PF	EET CLE	09/17/25 14:00
Total Recoverable	Analysis	6020B		1	672347	S4FJ	EET CLE	09/18/25 15:46
Total Recoverable	Prep	3005A			672064	F3PF	EET CLE	09/17/25 14:00
Total Recoverable	Analysis	6020B		5	672406	RKT	EET CLE	09/19/25 13:03
Total/NA	Prep	7470A			672069	F3PF	EET CLE	09/17/25 14:00
Total/NA	Analysis	7470A		1	672304	GEV	EET CLE	09/18/25 12:35
Total/NA	Analysis	2320 B-2021		1	672415	JMR	EET CLE	09/18/25 13:21
Total/NA	Analysis	2540 C-2020		1	672121	C5SV	EET CLE	09/17/25 14:46
Total/NA	Analysis	300.0		5	672091	JMR	EET CLE	09/18/25 14:36
Total/NA	Analysis	300.0		20	672091	JMR	EET CLE	09/18/25 14:44
Total/NA	Prep	PrecSep-21			737004	JTR	EET SL	09/22/25 08:15
Total/NA	Analysis	9315		1	740742	SWS	EET SL	10/15/25 21:14
Total/NA	Prep	PrecSep_0			737006	JTR	EET SL	09/22/25 08:22
Total/NA	Analysis	9320		1	740742	SWS	EET SL	10/15/25 09:54
Total/NA	Analysis	Ra226_Ra228		1	740621	CAH	EET SL	10/16/25 14:36

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

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

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-233163-1
Project/Site: Federal CCR Wells

Laboratory: Eurofins Cleveland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0806	12-31-26
Georgia	State	4062	02-27-26
Illinois	NELAP	200004	08-31-26
Iowa	State	421	06-01-27
Kansas	NELAP	E-10336	01-31-26
Kentucky (UST)	State	112225	02-28-26
Kentucky (WW)	State	KY98016	12-31-25
Minnesota	NELAP	039-999-348	12-31-25
New Hampshire	NELAP	2250	09-30-25
New Jersey	NELAP	OH001	06-30-26
New York	NELAP	10975	04-01-26
North Dakota	State	R-244	02-27-26
Ohio	State	8303	11-04-25
Ohio VAP	State	ORELAP 4062	02-28-26
Oregon	NELAP	4062	02-27-26
Pennsylvania	NELAP	68-00340	08-31-26
Texas	NELAP	T104704517	08-31-26
US Fish & Wildlife	US Federal Programs	A26406	02-28-26
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	09-14-26
West Virginia DEP	State	210	12-31-25
Wisconsin	State	399167560	08-31-26

Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-27
ANAB	Dept. of Defense ELAP	L2305	04-06-27
ANAB	Dept. of Energy	L2305.01	04-06-27
ANAB	ISO/IEC 17025	L2305	04-06-27
Arizona	State	AZ0813	12-08-25
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	07-01-26
Connecticut	State	PH-0241	03-31-27
Florida	NELAP	E87689	06-30-26
HI - RadChem Recognition	State	n/a	06-30-26
Illinois	NELAP	200023	11-30-25
Iowa	State	373	12-01-26
Kansas	NELAP	E-10236	10-31-25
Kentucky (DW)	State	KY90125	12-31-25
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-25
Louisiana (All)	NELAP	106151	06-30-26
Louisiana (DW)	State	LA011	12-31-25
Maryland	State	310	10-01-26
Massachusetts	State	M-MO054	06-30-26
MI - RadChem Recognition	State	9005	06-30-26
Missouri	State	780	06-30-28
Nevada	State	MO00054	07-31-26

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-233163-1
Project/Site: Federal CCR Wells

Laboratory: Eurofins St. Louis (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New Jersey	NELAP	MO002	06-30-26
New Mexico	State	MO00054	06-30-26
New York	NELAP	11616	03-31-26
North Carolina (DW)	State	29700	06-30-26
North Dakota	State	R-207	06-30-25 *
Oklahoma	NELAP	9997	12-31-25
Oregon	NELAP	4157	09-01-26
Pennsylvania	NELAP	68-00540	02-28-26
South Carolina	State	85002	06-30-26
Texas	NELAP	T104704193	07-31-26
US Fish & Wildlife	US Federal Programs	058448	07-31-26
USDA	US Federal Programs	525-23-138-94730	05-18-26
Utah	NELAP	MO00054	07-31-26
Virginia	NELAP	460230	06-14-26
Washington	State	C592	08-31-26
West Virginia DEP	State	381	10-31-25

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

Columbus
209

eurofins
Environment Testing

Client Information	Sampler: Bobby Casto	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s):	COC No. 240-111832-39818.1
Client Contact: Taylor Huffman	Phone: 740-373-4308	E-Mail: roxanne.cisneros@et.eurofinsus.com	State of Origin:	Page: Page 1 of 8
Company: Lightstone Generation Gavin Power LLC	PWSID			Job #:
Address: 7397 OH-7	Due Date Requested:			
City: Cheshire	TAT Requested (days):			
State, Zip: OH, 45620	Compliance Project: Δ Yes Δ No			
Phone: 740-925-3171(Tel)	PO #: 2935505			
Email: taylor.huffman@lightstonegen.com	WO #:			
Project Name: Gavin CCR	Project #: 24019633			
Site: Gavin	SSOW#:			

Analysis Requested

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wasteoil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B, 6020, 7470A	2540C_Calcd - TDS	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	300.0_28D - Chloride, Fluoride & Sulfate	2320B - (MOD) Alkalinity	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	N	D	N	N		
MW-17-F-20250915-01	9-15-25	1039	G	Water			1	1	2	1	1		
DUP-002-F-20250915-01	9-15-25	—	G	Water			1	1	2	1	1		
9806-F-20250915-01	9-15-25	1214	G	Water			1	1	2	1	1		
2003-F-20250915-01	9-15-25	1355	G	Water			1	1	2	1	1		
93108-F-20250915-01	9-15-25	1511	G	Water			1	1	2	1	1		
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									

240-233163 COC

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
	9-16-25/0930	KEMRON	Ashley McCloskey	9-16-25 1146	Euro
Ashley McCloskey	9-16-25 1700	Euro	J Martin	9/17/25 800	Eur

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

Ver: 06/08/2021

Eurofins – Cleveland Sample Receipt Form/Narrative Login # _____
Barberton Facility

Client Lightstone Gavin Site Name _____ Cooler unpacked by KMartin

Cooler Received on 9/17/25 Opened on 9/17/25

FedEx: 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other _____

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

Eurofins Cooler # EC 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 # 13 (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 1	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# HC567196
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

Labeled by

Labels Verified 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 # _____

Eurofins - Cleveland Sample Receipt Multiple Cooler Form

Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
(EC) Client Box Other	IR GUN #: 13	0.5	0.7	Wet Ice Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #: 1	4.1	4.3	Wet Ice Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #: 1	4.5	4.7	Wet Ice Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #: 1	0.3	0.5	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
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EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
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EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
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EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
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EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None

☐ See Temperature Excursion Form

9/17/2025

Login Container Summary Report

240-233163

10/16/2025

Temperature readings _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
MW-17-F-20250915-01	240-233163-A-1	Plastic 60 mL - unpreserved				
MW-17-F-20250915-01	240-233163-B-1	Plastic 60 mL - unpreserved				
MW-17-F-20250915-01	240-233163-C-1	Plastic 500ml - unpreserved				
MW-17-F-20250915-01	240-233163-D-1	Plastic 500ml - with Nitric Acid	<2			
MW-17-F-20250915-01	240-233163-E-1	Plastic 1 liter - Nitric Acid	<2			
MW-17-F-20250915-01	240-233163-F-1	Plastic 1 liter - Nitric Acid	<2			
DUP-002-F-20250915-01	240-233163-A-2	Plastic 60 mL unpreserved				
DUP-002-F-20250915-01	240-233163-B-2	Plastic 60 mL - unpreserved				
DUP-002-F-20250915-01	240-233163-C-2	Plastic 500ml - unpreserved				
DUP-002-F-20250915-01	240-233163-D-2	Plastic 500ml - with Nitric Acid	<2			
DUP-002-F-20250915-01	240-233163-E-2	Plastic 1 liter - Nitric Acid	<2			
DUP-002-F 20250915-01	240-233163-F-2	Plastic 1 liter Nitric Acid	<2			
9806-F-20250915-01	240-233163-A-3	Plastic 60 mL - unpreserved				
9806 F-20250915-01	240-233163-B-3	Plastic 60 mL unpreserved				
9806-F-20250915-01	240-233163-C-3	Plastic 500ml - unpreserved				
9806-F-20250915-01	240-233163-D-3	Plastic 500ml - with Nitric Acid	<2			
9806-F-20250915-01	240-233163-E-3	Plastic 1 liter - Nitric Acid	<2			
9806 F-20250915-01	240-233163-F-3	Plastic 1 liter - Nitric Acid	<2			
2003-F-20250915-01	240-233163-A-4	Plastic 60 mL - unpreserved				
2003 F-20250915-01	240-233163-B-4	Plastic 60 mL - unpreserved				
2003-F-20250915-01	240-233163-C-4	Plastic 500ml unpreserved				
2003-F-20250915-01	240-233163-D-4	Plastic 500ml - with Nitric Acid	<2			
2003-F-20250915-01	240-233163-E-4	Plastic 1 liter - Nitric Acid	<2			
2003-F-20250915-01	240-233163-F-4	Plastic 1 liter - Nitric Acid	<2			
93108-F-20250915-01	240 233163-A-5	Plastic 60 mL - unpreserved				
93108-F-20250915-01	240-233163-B 5	Plastic 60 mL - unpreserved				
93108-F-20250915-01	240-233163-C-5	Plastic 500ml - unpreserved				
93108-F-20250915-01	240-233163-D-5	Plastic 500ml - with Nitric Acid	<2			
93108-F-20250915-01	240-233163-E-5	Plastic 1 liter - Nitric Acid	<2			
93108-F-20250915-01	240-233163 F 5	Plastic 1 liter - Nitric Acid	<2			

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s): N/A	COC No: 240-207999.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: roxanne.cisneros@et.eurofinsus.com	State of Origin: Ohio	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): N/A		Job #: 240-233163-1
Address: 13715 Rider Trail North	Due Date Requested: 10/20/2025			
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Federal CCR Wells	Project #: 24019633			
Site: N/A	SSOW#: N/A			

Analysis Requested

Preservation Codes:

Other: N/A

Sample Identification Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9320_Ra228/PrecSep_0Radium-228 (GFPC)	9315_Ra226/PrecSep_21Radium-226 (GFPC)	Ra226Ra228_GFPCCombined Radium-226 and Radium-228	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
MW-17-F-20250915-01 (240-233163-1)	9/15/25	10:39 Eastern	G	Water			X	X	X	2	
DUP-002-F-20250915-01 (240-233163-2)	9/15/25	Eastern	G	Water			X	X	X	2	
9806-F-20250915-01 (240-233163-3)	9/15/25	12:14 Eastern	G	Water			X	X	X	2	
2003-F-20250915-01 (240-233163-4)	9/15/25	13:55 Eastern	G	Water			X	X	X	2	
93108-F-20250915-01 (240-233163-5)	9/15/25	15:11 Eastern	G	Water			X	X	X	2	

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

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

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Jcollins	9-17-25 1629	EAL			
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:

ICOC No:
240-207999

Containers

Count	Container Type	Preservative
10	Plastic 1 liter - Nitric Acid	Nitric Acid

Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-233163-1

Login Number: 233163
List Number: 2
Creator: Forrest, Cheyenne L

List Source: Eurofins St. Louis
List Creation: 09/18/25 12:44 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?	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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620

Generated 10/2/2025 11:27:35 PM

JOB DESCRIPTION

Federal CCR Wells Snap Sampler

JOB NUMBER

240-233483-1

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization

Roxanne Cisneros

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10/2/2025 11:27:35 PM

Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(330)497-9396

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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells Snap Sampler

Job ID: 240-233483-1

Qualifiers

Metals

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

Glossary

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

Job ID: 240-233483-1 — Eurofins Cleveland

Job Narrative
240-233483-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The samples were received on 9/20/2025 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 12 coolers at receipt time were 0.6°C, 0.9°C, 1.0°C, 1.1°C, 1.4°C, 1.4°C, 1.5°C, 1.6°C, 1.7°C, 2.1°C, 2.5°C and 12.7°C.

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

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

Method Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells Snap Sampler

Job ID: 240-233483-1

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CLE
6020B	Metals (ICP/MS)	SW846	EET CLE
7470A	Mercury (CVAA)	SW846	EET CLE
2540 C-2020	Solids, Total Dissolved (TDS)	SM	EET CLE
300.0	Anions, Ion Chromatography	EPA	EET CLE
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CLE
7470A	Preparation, Mercury	SW846	EET CLE

Protocol References:

EPA = US Environmental Protection Agency

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

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

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Sample Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells Snap Sampler

Job ID: 240-233483-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
240-233483-1	2018-03-F-20250918-01	Water	09/18/25 13:30	09/20/25 08:00	Ohio
240-233483-2	2018-04-F-20250918-01	Water	09/18/25 13:50	09/20/25 08:00	Ohio
240-233483-3	2018-02-F-20250918-01	Water	09/18/25 14:30	09/20/25 08:00	Ohio

Detection Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells Snap Sampler

Job ID: 240-233483-1

Client Sample ID: 2018-03-F-20250918-01 — Lab Sample ID: 240-233483-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	400		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	5.7		5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	110		5.0	0.77	ug/L	1		6020B	Total Recoverable
Calcium	200000		1000	250	ug/L	1		6020B	Total Recoverable
Chromium	5.4		5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	11		1.0	0.086	ug/L	1		6020B	Total Recoverable
Lead	1.8		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	49		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	42000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	3.5	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	3700		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	500000		1000	880	ug/L	1		6020B	Total Recoverable
Total Dissolved Solids	3300		50	39	mg/L	1		2540 C-2020	Total/NA
Chloride	1100		20	2.6	mg/L	20		300.0	Total/NA
Fluoride	0.80		0.10	0.048	mg/L	2		300.0	Total/NA
Sulfate	1000		20	7.0	mg/L	20		300.0	Total/NA

Client Sample ID: 2018-04-F-20250918-01 — Lab Sample ID: 240-233483-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	270		100	57	ug/L	1		6010D	Total Recoverable
Antimony	1.0	J	2.0	0.57	ug/L	1		6020B	Total Recoverable
Arsenic	5.8		5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	32		5.0	0.77	ug/L	1		6020B	Total Recoverable
Calcium	78000		1000	250	ug/L	1		6020B	Total Recoverable
Chromium	12		5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	2.6		1.0	0.086	ug/L	1		6020B	Total Recoverable
Lead	2.6		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	17		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	20000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	34		5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	3200		1000	220	ug/L	1		6020B	Total Recoverable
Selenium	2.4	J	5.0	0.89	ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland

Detection Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells Snap Sampler

Job ID: 240-233483-1

Client Sample ID: 2018-04-F-20250918-01 (Continued)

Lab Sample ID: 240-233483-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	410000		1000	880	ug/L	1		6020B	Total Recoverable
Total Dissolved Solids	1400		20	16	mg/L	1		2540 C-2020	Total/NA
Chloride	46		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.54		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	670		10	3.5	mg/L	10		300.0	Total/NA

Client Sample ID: 2018-02-F-20250918-01

Lab Sample ID: 240-233483-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	330		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	3.5	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	730		5.0	0.77	ug/L	1		6020B	Total Recoverable
Calcium	64000		1000	250	ug/L	1		6020B	Total Recoverable
Chromium	26		5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	2.1		1.0	0.086	ug/L	1		6020B	Total Recoverable
Lead	2.7		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	68		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	17000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	53		5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	4800		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	2300000		10000	8800	ug/L	10		6020B	Total Recoverable
Total Dissolved Solids	6100		100	78	mg/L	1		2540 C-2020	Total/NA
Chloride	4200		50	6.4	mg/L	50		300.0	Total/NA
Fluoride	1.5		0.25	0.12	mg/L	5		300.0	Total/NA
Sulfate	37		5.0	1.7	mg/L	5		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells Snap Sampler

Job ID: 240-233483-1

Client Sample ID: 2018-03-F-20250918-01
Date Collected: 09/18/25 13:30
Date Received: 09/20/25 08:00

Lab Sample ID: 240-233483-1
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	400		100	57	ug/L		09/23/25 14:00	09/24/25 12:27	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		09/22/25 14:00	09/23/25 17:09	1
Arsenic	5.7		5.0	0.75	ug/L		09/22/25 14:00	09/23/25 17:09	1
Barium	110		5.0	0.77	ug/L		09/22/25 14:00	09/23/25 17:09	1
Beryllium	ND		1.0	0.27	ug/L		09/22/25 14:00	09/23/25 17:09	1
Cadmium	ND		1.0	0.077	ug/L		09/22/25 14:00	09/23/25 17:09	1
Calcium	200000		1000	250	ug/L		09/22/25 14:00	09/23/25 17:09	1
Chromium	5.4		5.0	1.2	ug/L		09/22/25 14:00	09/23/25 17:09	1
Cobalt	11		1.0	0.086	ug/L		09/22/25 14:00	09/23/25 17:09	1
Lead	1.8		1.0	0.45	ug/L		09/22/25 14:00	09/23/25 17:09	1
Lithium	49		8.0	3.4	ug/L		09/22/25 14:00	09/23/25 17:09	1
Magnesium	42000		1000	61	ug/L		09/22/25 14:00	09/23/25 17:09	1
Molybdenum	3.5	J	5.0	1.1	ug/L		09/22/25 14:00	09/23/25 17:09	1
Potassium	3700		1000	220	ug/L		09/22/25 14:00	09/23/25 17:09	1
Selenium	ND		5.0	0.89	ug/L		09/22/25 14:00	09/23/25 17:09	1
Sodium	500000		1000	880	ug/L		09/22/25 14:00	09/24/25 10:24	1
Thallium	ND		1.0	0.51	ug/L		09/22/25 14:00	09/23/25 17:09	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		09/22/25 14:00	09/23/25 12:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540 C-2020)	3300		50	39	mg/L			09/24/25 15:14	1
Chloride (EPA 300.0)	1100		20	2.6	mg/L			09/24/25 04:43	20
Fluoride (EPA 300.0)	0.80		0.10	0.048	mg/L			09/24/25 04:35	2
Sulfate (EPA 300.0)	1000		20	7.0	mg/L			09/24/25 04:43	20

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells Snap Sampler

Job ID: 240-233483-1

Client Sample ID: 2018-04-F-20250918-01
Date Collected: 09/18/25 13:50
Date Received: 09/20/25 08:00

Lab Sample ID: 240-233483-2
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	270		100	57	ug/L		09/23/25 14:00	09/24/25 12:32	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.0	J	2.0	0.57	ug/L		09/22/25 14:00	09/23/25 17:11	1
Arsenic	5.8		5.0	0.75	ug/L		09/22/25 14:00	09/23/25 17:11	1
Barium	32		5.0	0.77	ug/L		09/22/25 14:00	09/23/25 17:11	1
Beryllium	ND		1.0	0.27	ug/L		09/22/25 14:00	09/23/25 17:11	1
Cadmium	ND		1.0	0.077	ug/L		09/22/25 14:00	09/23/25 17:11	1
Calcium	78000		1000	250	ug/L		09/22/25 14:00	09/23/25 17:11	1
Chromium	12		5.0	1.2	ug/L		09/22/25 14:00	09/23/25 17:11	1
Cobalt	2.6		1.0	0.086	ug/L		09/22/25 14:00	09/23/25 17:11	1
Lead	2.6		1.0	0.45	ug/L		09/22/25 14:00	09/23/25 17:11	1
Lithium	17		8.0	3.4	ug/L		09/22/25 14:00	09/23/25 17:11	1
Magnesium	20000		1000	61	ug/L		09/22/25 14:00	09/23/25 17:11	1
Molybdenum	34		5.0	1.1	ug/L		09/22/25 14:00	09/23/25 17:11	1
Potassium	3200		1000	220	ug/L		09/22/25 14:00	09/23/25 17:11	1
Selenium	2.4	J	5.0	0.89	ug/L		09/22/25 14:00	09/23/25 17:11	1
Sodium	410000		1000	880	ug/L		09/22/25 14:00	09/24/25 10:27	1
Thallium	ND		1.0	0.51	ug/L		09/22/25 14:00	09/23/25 17:11	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		09/22/25 14:00	09/23/25 12:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540 C-2020)	1400		20	16	mg/L			09/24/25 14:41	1
Chloride (EPA 300.0)	46		1.0	0.13	mg/L			09/24/25 01:41	1
Fluoride (EPA 300.0)	0.54		0.050	0.024	mg/L			09/24/25 01:41	1
Sulfate (EPA 300.0)	670		10	3.5	mg/L			09/24/25 02:24	10

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells Snap Sampler

Job ID: 240-233483-1

Client Sample ID: 2018-02-F-20250918-01
Date Collected: 09/18/25 14:30
Date Received: 09/20/25 08:00

Lab Sample ID: 240-233483-3
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	330		100	57	ug/L		09/23/25 14:00	09/24/25 12:36	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		09/22/25 14:00	09/23/25 17:14	1
Arsenic	3.5	J	5.0	0.75	ug/L		09/22/25 14:00	09/23/25 17:14	1
Barium	730		5.0	0.77	ug/L		09/22/25 14:00	09/23/25 17:14	1
Beryllium	ND		1.0	0.27	ug/L		09/22/25 14:00	09/23/25 17:14	1
Cadmium	ND		1.0	0.077	ug/L		09/22/25 14:00	09/23/25 17:14	1
Calcium	64000		1000	250	ug/L		09/22/25 14:00	09/23/25 17:14	1
Chromium	26		5.0	1.2	ug/L		09/22/25 14:00	09/23/25 17:14	1
Cobalt	2.1		1.0	0.086	ug/L		09/22/25 14:00	09/23/25 17:14	1
Lead	2.7		1.0	0.45	ug/L		09/22/25 14:00	09/23/25 17:14	1
Lithium	68		8.0	3.4	ug/L		09/22/25 14:00	09/23/25 17:14	1
Magnesium	17000		1000	61	ug/L		09/22/25 14:00	09/23/25 17:14	1
Molybdenum	53		5.0	1.1	ug/L		09/22/25 14:00	09/23/25 17:14	1
Potassium	4800		1000	220	ug/L		09/22/25 14:00	09/23/25 17:14	1
Selenium	ND		5.0	0.89	ug/L		09/22/25 14:00	09/23/25 17:14	1
Sodium	2300000		10000	8800	ug/L		09/22/25 14:00	09/24/25 10:29	10
Thallium	ND		1.0	0.51	ug/L		09/22/25 14:00	09/23/25 17:14	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		09/22/25 14:00	09/23/25 12:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540 C-2020)	6100		100	78	mg/L			09/24/25 14:41	1
Chloride (EPA 300.0)	4200		50	6.4	mg/L			09/24/25 05:53	50
Fluoride (EPA 300.0)	1.5		0.25	0.12	mg/L			09/24/25 05:45	5
Sulfate (EPA 300.0)	37		5.0	1.7	mg/L			09/24/25 05:45	5

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-672900/1-A
Matrix: Water
Analysis Batch: 673137

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 672900

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		09/23/25 14:00	09/24/25 11:35	1

Lab Sample ID: LCS 240-672900/2-A
Matrix: Water
Analysis Batch: 673137

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 672900

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1000	1010		ug/L		101	80 - 120

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-672724/1-A
Matrix: Water
Analysis Batch: 672975

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 672724

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		09/22/25 14:00	09/23/25 16:38	1
Arsenic	ND		5.0	0.75	ug/L		09/22/25 14:00	09/23/25 16:38	1
Barium	ND		5.0	0.77	ug/L		09/22/25 14:00	09/23/25 16:38	1
Beryllium	ND		1.0	0.27	ug/L		09/22/25 14:00	09/23/25 16:38	1
Cadmium	ND		1.0	0.077	ug/L		09/22/25 14:00	09/23/25 16:38	1
Calcium	ND		1000	250	ug/L		09/22/25 14:00	09/23/25 16:38	1
Chromium	ND		5.0	1.2	ug/L		09/22/25 14:00	09/23/25 16:38	1
Cobalt	ND		1.0	0.086	ug/L		09/22/25 14:00	09/23/25 16:38	1
Lead	ND		1.0	0.45	ug/L		09/22/25 14:00	09/23/25 16:38	1
Lithium	ND		8.0	3.4	ug/L		09/22/25 14:00	09/23/25 16:38	1
Magnesium	ND		1000	61	ug/L		09/22/25 14:00	09/23/25 16:38	1
Molybdenum	ND		5.0	1.1	ug/L		09/22/25 14:00	09/23/25 16:38	1
Potassium	ND		1000	220	ug/L		09/22/25 14:00	09/23/25 16:38	1
Selenium	ND		5.0	0.89	ug/L		09/22/25 14:00	09/23/25 16:38	1
Sodium	ND		1000	880	ug/L		09/22/25 14:00	09/23/25 16:38	1
Thallium	ND		1.0	0.51	ug/L		09/22/25 14:00	09/23/25 16:38	1

Lab Sample ID: LCS 240-672724/3-A
Matrix: Water
Analysis Batch: 672975

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 672724

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	101		ug/L		101	80 - 120
Arsenic	1000	1030		ug/L		103	80 - 120
Barium	1000	987		ug/L		99	80 - 120
Beryllium	500	523		ug/L		105	80 - 120
Cadmium	500	477		ug/L		95	80 - 120
Calcium	25000	26200		ug/L		105	80 - 120
Chromium	500	520		ug/L		104	80 - 120
Cobalt	500	509		ug/L		102	80 - 120
Lead	500	512		ug/L		102	80 - 120
Lithium	500	524		ug/L		105	80 - 120
Magnesium	25000	25900		ug/L		104	80 - 120

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

Lab Sample ID: LCS 240-672724/3-A
Matrix: Water
Analysis Batch: 672975

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 672724

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Molybdenum	500	503		ug/L		101	80 - 120
Potassium	25000	26300		ug/L		105	80 - 120
Selenium	1000	988		ug/L		99	80 - 120
Sodium	25000	26100		ug/L		104	80 - 120
Thallium	1000	1010		ug/L		101	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-672734/1-A
Matrix: Water
Analysis Batch: 672955

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 672734

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		09/22/25 14:00	09/23/25 12:09	1

Lab Sample ID: LCS 240-672734/2-A
Matrix: Water
Analysis Batch: 672955

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 672734

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	4.68		ug/L		94	80 - 120

Method: 2540 C-2020 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 240-673067/1
Matrix: Water
Analysis Batch: 673067

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	ND		10	7.8	mg/L			09/24/25 10:07	1

Lab Sample ID: LCS 240-673067/2
Matrix: Water
Analysis Batch: 673067

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	176	147		mg/L		84	80 - 120

Lab Sample ID: MB 240-673141/1
Matrix: Water
Analysis Batch: 673141

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	ND		10	7.8	mg/L			09/24/25 14:41	1

Lab Sample ID: LCS 240-673141/2
Matrix: Water
Analysis Batch: 673141

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	176	151		mg/L		86	80 - 120

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-672920/3
Matrix: Water
Analysis Batch: 672920

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.13	mg/L			09/23/25 22:39	1
Fluoride	ND		0.050	0.024	mg/L			09/23/25 22:39	1
Sulfate	ND		1.0	0.35	mg/L			09/23/25 22:39	1

Lab Sample ID: LCS 240-672920/4
Matrix: Water
Analysis Batch: 672920

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			50.0	49.3		mg/L		99	90 - 110		
Fluoride			2.50	2.53		mg/L		101	90 - 110		
Sulfate			50.0	49.1		mg/L		98	90 - 110		

Lab Sample ID: 240-233483-2 MS
Matrix: Water
Analysis Batch: 672920

Client Sample ID: 2018-04-F-20250918-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	46		50.0	95.4		mg/L		98	80 - 120		
Fluoride	0.54		2.50	3.10		mg/L		102	80 - 120		

Lab Sample ID: 240-233483-2 MS
Matrix: Water
Analysis Batch: 672920

Client Sample ID: 2018-04-F-20250918-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Sulfate	670		500	1130		mg/L		91	80 - 120		

Lab Sample ID: 240-233483-2 MSD
Matrix: Water
Analysis Batch: 672920

Client Sample ID: 2018-04-F-20250918-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	46		50.0	95.2		mg/L		98	80 - 120	0	15
Fluoride	0.54		2.50	3.06		mg/L		100	80 - 120	1	15

Lab Sample ID: 240-233483-2 MSD
Matrix: Water
Analysis Batch: 672920

Client Sample ID: 2018-04-F-20250918-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfate	670		500	1140		mg/L		94	80 - 120	1	15

Metals

Prep Batch: 672724

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233483-1	2018-03-F-20250918-01	Total Recoverable	Water	3005A	
240-233483-2	2018-04-F-20250918-01	Total Recoverable	Water	3005A	
240-233483-3	2018-02-F-20250918-01	Total Recoverable	Water	3005A	
MB 240-672724/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-672724/3-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 672734

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233483-1	2018-03-F-20250918-01	Total/NA	Water	7470A	
240-233483-2	2018-04-F-20250918-01	Total/NA	Water	7470A	
240-233483-3	2018-02-F-20250918-01	Total/NA	Water	7470A	
MB 240-672734/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-672734/2-A	Lab Control Sample	Total/NA	Water	7470A	

Prep Batch: 672900

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233483-1	2018-03-F-20250918-01	Total Recoverable	Water	3005A	
240-233483-2	2018-04-F-20250918-01	Total Recoverable	Water	3005A	
240-233483-3	2018-02-F-20250918-01	Total Recoverable	Water	3005A	
MB 240-672900/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-672900/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 672955

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233483-1	2018-03-F-20250918-01	Total/NA	Water	7470A	672734
240-233483-2	2018-04-F-20250918-01	Total/NA	Water	7470A	672734
240-233483-3	2018-02-F-20250918-01	Total/NA	Water	7470A	672734
MB 240-672734/1-A	Method Blank	Total/NA	Water	7470A	672734
LCS 240-672734/2-A	Lab Control Sample	Total/NA	Water	7470A	672734

Analysis Batch: 672975

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233483-1	2018-03-F-20250918-01	Total Recoverable	Water	6020B	672724
240-233483-2	2018-04-F-20250918-01	Total Recoverable	Water	6020B	672724
240-233483-3	2018-02-F-20250918-01	Total Recoverable	Water	6020B	672724
MB 240-672724/1-A	Method Blank	Total Recoverable	Water	6020B	672724
LCS 240-672724/3-A	Lab Control Sample	Total Recoverable	Water	6020B	672724

Analysis Batch: 673137

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233483-1	2018-03-F-20250918-01	Total Recoverable	Water	6010D	672900
240-233483-2	2018-04-F-20250918-01	Total Recoverable	Water	6010D	672900
240-233483-3	2018-02-F-20250918-01	Total Recoverable	Water	6010D	672900
MB 240-672900/1-A	Method Blank	Total Recoverable	Water	6010D	672900
LCS 240-672900/2-A	Lab Control Sample	Total Recoverable	Water	6010D	672900

Analysis Batch: 673142

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233483-1	2018-03-F-20250918-01	Total Recoverable	Water	6020B	672724
240-233483-2	2018-04-F-20250918-01	Total Recoverable	Water	6020B	672724
240-233483-3	2018-02-F-20250918-01	Total Recoverable	Water	6020B	672724

General Chemistry

Analysis Batch: 672920

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233483-1	2018-03-F-20250918-01	Total/NA	Water	300.0	
240-233483-1	2018-03-F-20250918-01	Total/NA	Water	300.0	
240-233483-2	2018-04-F-20250918-01	Total/NA	Water	300.0	
240-233483-2	2018-04-F-20250918-01	Total/NA	Water	300.0	
240-233483-3	2018-02-F-20250918-01	Total/NA	Water	300.0	
240-233483-3	2018-02-F-20250918-01	Total/NA	Water	300.0	
MB 240-672920/3	Method Blank	Total/NA	Water	300.0	
LCS 240-672920/4	Lab Control Sample	Total/NA	Water	300.0	
240-233483-2 MS	2018-04-F-20250918-01	Total/NA	Water	300.0	
240-233483-2 MS	2018-04-F-20250918-01	Total/NA	Water	300.0	
240-233483-2 MSD	2018-04-F-20250918-01	Total/NA	Water	300.0	
240-233483-2 MSD	2018-04-F-20250918-01	Total/NA	Water	300.0	

Analysis Batch: 673067

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233483-1	2018-03-F-20250918-01	Total/NA	Water	2540 C-2020	
MB 240-673067/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-673067/2	Lab Control Sample	Total/NA	Water	2540 C-2020	

Analysis Batch: 673141

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233483-2	2018-04-F-20250918-01	Total/NA	Water	2540 C-2020	
240-233483-3	2018-02-F-20250918-01	Total/NA	Water	2540 C-2020	
MB 240-673141/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-673141/2	Lab Control Sample	Total/NA	Water	2540 C-2020	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-233483-1
Project/Site: Federal CCR Wells Snap Sampler

Client Sample ID: 2018-03-F-20250918-01
Lab Sample ID: 240-233483-1

Date Collected: 09/18/25 13:30
Matrix: Water
Date Received: 09/20/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			672900	F3PF	EET CLE	09/23/25 14:00
Total Recoverable	Analysis	6010D		1	673137	AJC	EET CLE	09/24/25 12:27
Total Recoverable	Prep	3005A			672724	F3PF	EET CLE	09/22/25 14:00
Total Recoverable	Analysis	6020B		1	672975	S4FJ	EET CLE	09/23/25 17:09
Total Recoverable	Prep	3005A			672724	F3PF	EET CLE	09/22/25 14:00
Total Recoverable	Analysis	6020B		1	673142	S4FJ	EET CLE	09/24/25 10:24
Total/NA	Prep	7470A			672734	F3PF	EET CLE	09/22/25 14:00
Total/NA	Analysis	7470A		1	672955	TQ6W	EET CLE	09/23/25 12:23
Total/NA	Analysis	2540 C-2020		1	673067	TAV2	EET CLE	09/24/25 15:14
Total/NA	Analysis	300.0		2	672920	JWW	EET CLE	09/24/25 04:35
Total/NA	Analysis	300.0		20	672920	JWW	EET CLE	09/24/25 04:43

Client Sample ID: 2018-04-F-20250918-01
Lab Sample ID: 240-233483-2

Date Collected: 09/18/25 13:50
Matrix: Water
Date Received: 09/20/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			672900	F3PF	EET CLE	09/23/25 14:00
Total Recoverable	Analysis	6010D		1	673137	AJC	EET CLE	09/24/25 12:32
Total Recoverable	Prep	3005A			672724	F3PF	EET CLE	09/22/25 14:00
Total Recoverable	Analysis	6020B		1	672975	S4FJ	EET CLE	09/23/25 17:11
Total Recoverable	Prep	3005A			672724	F3PF	EET CLE	09/22/25 14:00
Total Recoverable	Analysis	6020B		1	673142	S4FJ	EET CLE	09/24/25 10:27
Total/NA	Prep	7470A			672734	F3PF	EET CLE	09/22/25 14:00
Total/NA	Analysis	7470A		1	672955	TQ6W	EET CLE	09/23/25 12:24
Total/NA	Analysis	2540 C-2020		1	673141	TAV2	EET CLE	09/24/25 14:41
Total/NA	Analysis	300.0		1	672920	JWW	EET CLE	09/24/25 01:41
Total/NA	Analysis	300.0		10	672920	JWW	EET CLE	09/24/25 02:24

Client Sample ID: 2018-02-F-20250918-01
Lab Sample ID: 240-233483-3

Date Collected: 09/18/25 14:30
Matrix: Water
Date Received: 09/20/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			672900	F3PF	EET CLE	09/23/25 14:00
Total Recoverable	Analysis	6010D		1	673137	AJC	EET CLE	09/24/25 12:36
Total Recoverable	Prep	3005A			672724	F3PF	EET CLE	09/22/25 14:00
Total Recoverable	Analysis	6020B		1	672975	S4FJ	EET CLE	09/23/25 17:14
Total Recoverable	Prep	3005A			672724	F3PF	EET CLE	09/22/25 14:00
Total Recoverable	Analysis	6020B		10	673142	S4FJ	EET CLE	09/24/25 10:29
Total/NA	Prep	7470A			672734	F3PF	EET CLE	09/22/25 14:00
Total/NA	Analysis	7470A		1	672955	TQ6W	EET CLE	09/23/25 12:29
Total/NA	Analysis	2540 C-2020		1	673141	TAV2	EET CLE	09/24/25 14:41
Total/NA	Analysis	300.0		5	672920	JWW	EET CLE	09/24/25 05:45

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-233483-1
Project/Site: Federal CCR Wells Snap Sampler

Client Sample ID: 2018-02-F-20250918-01
Lab Sample ID: 240-233483-3
Date Collected: 09/18/25 14:30
Matrix: Water
Date Received: 09/20/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		50	672920	JWW	EET CLE	09/24/25 05:53

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-233483-1
Project/Site: Federal CCR Wells Snap Sampler

Laboratory: Eurofins Cleveland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0806	12-31-26
Georgia	State	4062	02-27-26
Illinois	NELAP	200004	08-31-26
Iowa	State	421	06-01-27
Kansas	NELAP	E-10336	01-31-26
Kentucky (UST)	State	112225	02-28-26
Kentucky (WW)	State	KY98016	12-31-25
Minnesota	NELAP	039-999-348	12-31-25
New Hampshire	NELAP	2250	09-30-25
New Jersey	NELAP	OH001	06-30-26
New York	NELAP	10975	04-01-26
North Dakota	State	R-244	02-27-26
Ohio	State	8303	11-04-25
Ohio VAP	State	ORELAP 4062	02-28-26
Oregon	NELAP	4062	02-27-26
Pennsylvania	NELAP	68-00340	08-31-26
Texas	NELAP	T104704517	08-31-26
US Fish & Wildlife	US Federal Programs	A26406	02-28-26
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	09-14-26
West Virginia DEP	State	210	12-31-25
Wisconsin	State	399167560	08-31-26

COLUMBUS
209

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

Chain of Custody Record

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Client Information	Sampler: Bobby Casto	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s):	COC No: 240-93018-34502
Client Contact: Taylor Huffman	Phone: 740-373-4308	E-Mail: roxanne.cisneros@Eurofinset.com	State of Origin:	Page: Page 1 of 1
Company: Lightstone Generation Gavin Power LLC	PWSID:	Analysis Requested		Job #:
Address: 7397 OH-7	Due Date Requested:			Preservation Codes: A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify), Other:
City: Cheshire	TAT Requested (days):			
State, Zip: OH, 45620	Compliance Project: Δ Yes Δ No			
Phone: 740-925-3171(Tel)	PO #: 2935505			
Email: taylor.huffman@lightstonegen.com	WO #:			
Project Name: Federal - CCR Wells Snap Sampler-App 3 and App 4	Project #: 24019633			
Site: Ohio	SSOW#:			

240-233483 COC

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Wwater, S=solid, O=wasteoil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300.0, SM2540C	6020a, 6020b	Total Number of containers	Limited Volume App III and IV (Unpreserved with focus on TDS, Cl-, SO4 and F) Nitric Acid with focus on Ca and B)
			Preservation Code:				N	D		
2018-03-F-20250918-01	9-18-25	1330	G	W			1	1	3	*Extra Sample
2018-04-F-20250918-01	9-18-25	1350	G	W			1	1	3	collected in 250ml
2018-02-F-20250918-01	9-18-25	1430	G	W			1	1	3	unpreserved bottle

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	[signature]	9-19-25/0930	Kenbel	Ashley McCluskey	9-19-25 1325	EURO
2	[signature]	09/19/25 1700	EURO	JORDAN N PYLES	9/20/25 0800	EURO
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 01/16/2019

Eurofins – Cleveland Sample Receipt Form/Narrative Login # _____
Barberton Facility

Client GAVIN Site Name _____ Cooler unpacked by: JPYLES

Cooler Received on 9/20/25 Opened on 9/20/25

FedEx. 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other _____

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

Eurofins Cooler # EC 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 # 13 (CF +.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_____	(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# HC567196
14 Were VOAs on the COC?	JP (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

Labeled by:

Labels Verified 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 # _____

Eurofins - Cleveland Sample Receipt Multiple Cooler Form

Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
EC Client Box Other	IR GUN #: 13	1.9	2.1	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: 1	1.4	1.6	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: 1	1.5	1.7	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: 1	12.5	12.7	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: 13	0.9	1.1	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: 1	1.3	1.5	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: 1	0.4	0.6	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: 1	1.2	1.4	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: 1	2.3	2.5	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: 1	0.7	0.9	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: 1	1.2	1.4	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: 1	0.8	1.0	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
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EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None

☐ See Temperature Excursion Form

9/20/2025

Login Container Summary Report

240-233483

10/2/2025

Temperature readings _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
2018-03-F-20250918-01	240 233483-A-1	Plastic 250ml - unpreserved				
2018-03-F-20250918-01	240-233483 B-1	Plastic 250ml - unpreserved				
2018-03-F-20250918-01	240-233483-C-1	Plastic 250ml - with Nitric Acid	<2			
2018-04-F-20250918-01	240-233483-A-2	Plastic 250ml - unpreserved				
2018-04-F-20250918-01	240-233483-B-2	Plastic 250ml - unpreserved				
2018-04-F-20250918-01	240-233483-C-2	Plastic 250ml - with Nitric Acid	<2			
2018-02-F 20250918-01	240 233483-A-3	Plastic 250ml - unpreserved				
2018-02-F-20250918-01	240-233483-B-3	Plastic 250ml - unpreserved				
2018-02-F-20250918-01	240-233483-C-3	Plastic 250ml - with Nitric Acid	<2			

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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620
Generated 10/22/2025 1:48:30 PM

JOB DESCRIPTION

Federal CCR Wells

JOB NUMBER

240-233485-1

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization

Roxanne Cisneros

Generated
10/22/2025 1:48:30 PM

Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(330)497-9396

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Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-233485-1

Qualifiers

Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
^2	Calibration Blank (ICB and/or CCB) is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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.
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: 240-233485-1 Eurofins Cleveland

Job Narrative
240-233485-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The samples were received on 9/20/2025 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 12 coolers at receipt time were 0.6°C, 0.9°C, 1.0°C, 1.1°C, 1.4°C, 1.4°C, 1.5°C, 1.6°C, 1.7°C, 2.1°C, 2.5°C and 12.7°C.

Metals
Method 6020B - Total Recoverable: The continuing calibration blank (CCB) for analytical batch 240-672980 contained sodium above the reporting limit (RL). All reported samples associated with this CCB were at a concentration greater than 10X the value found in the CCB; therefore, re-analysis of samples was not performed.
2022-12-F-20250917-01 (240-233485-5)

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

General Chemistry
Method 300.0_28D: The following samples were diluted due to the nature of the sample matrix: 9631-F-20250917-01 (240-233485-8) and DUP-003-F-20250917-01 (240-233485-9). Elevated reporting limits (RLs) are provided.

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

Gas Flow Proportional Counter
Method 9315_Ra226: Radium 226 Prep batch 160-737502

The barium carrier recovery is outside the upper control limit (110%) for the following samples: 9631-F-20250917-01 (240-233485-8) and DUP-003-F-20250917-01 (240-233485-9). There was physical evidence of matrix interference apparent during the initial preparation of the sample. The samples formed a large pellet and need extra sodium hydroxide to dissolve in out of in-growth process. The QC samples associated with the batch have acceptable carrier recovery indicating the presence of matrix interference.

Method 9315_Ra226: Radium-226 batch 737502
The following sample has a barium carrier recovery above the 110% QC limit. Affected samples had a barium correction applied, however, there is significant concentrations of salt-like compounds (i.e. calcium, magnesium, sodium, and strontium) that can interfere with a barium sulfate recovery. The LCS (laboratory control sample) has an acceptable spike recovery demonstrating acceptable sample preparation and instrument performance. The samples have been truncated to 100% to reduce any potential bias a high carrier recovery may have. The data have been qualified and reported. 9631-F-20250917-01 (240-233485-8) and DUP-003-F-20250917-01 (240-233485-9)

Method 9320_Ra228: Radium 228 Prep batch 160-737503

The barium carrier recovery is outside the upper control limit (110%) for the following samples: 9631-F-20250917-01 (240-233485-8) and DUP-003-F-20250917-01 (240-233485-9). There was physical evidence of matrix interference apparent during the initial preparation of the sample. The samples formed a large pellet and need extra sodium hydroxide to dissolve in out of in-growth process. The QC samples associated with the batch have acceptable carrier recovery indicating the presence of matrix interference.

Job ID: 240-233485-1 (Continued) Eurofins Cleveland

Method 9320_Ra228: Radium-228 batch 737503
The following sample has a barium carrier recovery above the 110% QC limit. Affected samples had a barium correction applied, however, there is significant concentrations of salt-like compounds (i.e. calcium, magnesium, sodium, and strontium) that can interfere with a barium sulfate recovery. The LCS (laboratory control sample) has an acceptable spike recovery demonstrating acceptable sample preparation and instrument performance. The samples have been truncated to 100% to reduce any potential bias a high carrier recovery may have. The data have been qualified and reported. 9631-F-20250917-01 (240-233485-8) and DUP-003-F-20250917-01 (240-233485-9)

Method 9320_Ra228: Radium-228 batch 737503
The detection goal was not met for the following sample due to the reduced sample volume in prep attributed to the presence of matrix interferences: 2022-02-F-20250916-01 (240-233485-1). Analytical results are reported with the detection limit achieved.

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

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

Method Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-233485-1

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CLE
6020B	Metals (ICP/MS)	SW846	EET CLE
7470A	Mercury (CVAA)	SW846	EET CLE
2320 B-2021	Alkalinity	SM	EET CLE
2540 C-2020	Solids, Total Dissolved (TDS)	SM	EET CLE
300.0	Anions, Ion Chromatography	EPA	EET CLE
9315	Radium 226 by GFPC	SW846	EET SL
9320	Radium-228 (GFPC)	SW846	EET SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	EET SL
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CLE
7470A	Preparation, Mercury	SW846	EET CLE
PrecSep_0	Preparation, Precipitate Separation	None	EET SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	EET SL

Protocol References:

EPA = US Environmental Protection Agency

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:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

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

Sample Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-233485-1
Project/Site: Federal CCR Wells

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
240-233485-1	2022-02-F-20250916-01	Water	09/16/25 10:44	09/20/25 08:00	Ohio
240-233485-2	2022-03-F-20250916-01	Water	09/16/25 12:17	09/20/25 08:00	Ohio
240-233485-3	9801-F-20250916-01	Water	09/16/25 14:10	09/20/25 08:00	Ohio
240-233485-4	9802-F-20250916-01	Water	09/16/25 14:54	09/20/25 08:00	Ohio
240-233485-5	2022-12-F-20250917-01	Water	09/17/25 09:30	09/20/25 08:00	Ohio
240-233485-6	2022-13-F-20250917-01	Water	09/17/25 10:33	09/20/25 08:00	Ohio
240-233485-7	94136-F-20250917-01	Water	09/17/25 12:46	09/20/25 08:00	Ohio
240-233485-8	9631-F-20250917-01	Water	09/17/25 14:39	09/20/25 08:00	Ohio
240-233485-9	DUP-003-F-20250917-01	Water	09/17/25 00:00	09/20/25 08:00	Ohio
240-233485-10	2016-05-F-20250917-01	Water	09/17/25 11:50	09/20/25 08:00	Ohio

Detection Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-233485-1

Client Sample ID: 2022-02-F-20250916-01 — Lab Sample ID: 240-233485-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	500		100	57	ug/L	1		6010D	Total Recoverable
Antimony	1.1	J	2.0	0.57	ug/L	1		6020B	Total Recoverable
Arsenic	1.8	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	640		5.0	0.77	ug/L	1		6020B	Total Recoverable
Calcium	30000		1000	250	ug/L	1		6020B	Total Recoverable
Chromium	320		5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	8.6		1.0	0.086	ug/L	1		6020B	Total Recoverable
Lead	1.3		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	50		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	8400		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	97		5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	4500		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	1700000		10000	8800	ug/L	10		6020B	Total Recoverable
Total Alkalinity	300		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	300		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	3900		50	39	mg/L	1		2540 C-2020	Total/NA
Chloride	2300		20	2.6	mg/L	20		300.0	Total/NA
Fluoride	1.7		0.25	0.12	mg/L	5		300.0	Total/NA
Sulfate	69		5.0	1.7	mg/L	5		300.0	Total/NA

Client Sample ID: 2022-03-F-20250916-01 — Lab Sample ID: 240-233485-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	430		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	2.2	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	910		5.0	0.77	ug/L	1		6020B	Total Recoverable
Calcium	330000		1000	250	ug/L	1		6020B	Total Recoverable
Chromium	1.7	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	1.8		1.0	0.086	ug/L	1		6020B	Total Recoverable
Lithium	600		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	110000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	150		5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	22000		1000	220	ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: 2022-03-F-20250916-01 (Continued) — Lab Sample ID: 240-233485-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Selenium	1.3	J	5.0	0.89	ug/L	1		6020B	Total Recoverable
Sodium	7700000		10000	8800	ug/L	10		6020B	Total Recoverable
Total Alkalinity	350		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	350		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	17000		1000	780	mg/L	1		2540 C-2020	Total/NA
Chloride	14000		100	13	mg/L	100		300.0	Total/NA
Sulfate	440		100	35	mg/L	100		300.0	Total/NA

Client Sample ID: 9801-F-20250916-01 — Lab Sample ID: 240-233485-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	410		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	1.4	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	4800		5.0	0.77	ug/L	1		6020B	Total Recoverable
Calcium	210000		1000	250	ug/L	1		6020B	Total Recoverable
Cobalt	1.1		1.0	0.086	ug/L	1		6020B	Total Recoverable
Lithium	120		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	57000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	3.7	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	9400		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	4600000		10000	8800	ug/L	10		6020B	Total Recoverable
Total Alkalinity	130		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	130		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	11000		1000	780	mg/L	1		2540 C-2020	Total/NA
Chloride	8300		50	6.4	mg/L	50		300.0	Total/NA
Fluoride	1.1		0.50	0.24	mg/L	10		300.0	Total/NA
Sulfate	6.1	J	10	3.5	mg/L	10		300.0	Total/NA

Client Sample ID: 9802-F-20250916-01 — Lab Sample ID: 240-233485-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	190		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	0.85	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	67		5.0	0.77	ug/L	1		6020B	Total Recoverable
Calcium	32000		1000	250	ug/L	1		6020B	Total Recoverable
Chromium	1.7	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	0.65	J	1.0	0.086	ug/L	1		6020B	Total Recoverable
Lithium	13		8.0	3.4	ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: 9802-F-20250916-01 (Continued)
Lab Sample ID: 240-233485-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	8800		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	4.3	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	1500		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	280000		1000	880	ug/L	1		6020B	Total Recoverable
Total Alkalinity	570		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	570		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	770		10	7.8	mg/L	1		2540 C-2020	Total/NA
Chloride	38		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.98		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	63		1.0	0.35	mg/L	1		300.0	Total/NA

Client Sample ID: 2022-12-F-20250917-01
Lab Sample ID: 240-233485-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	81	J	100	57	ug/L	1		6010D	Total Recoverable
Barium	14		5.0	0.77	ug/L	1		6020B	Total Recoverable
Cadmium	0.15	J	1.0	0.077	ug/L	1		6020B	Total Recoverable
Calcium	83000		1000	250	ug/L	1		6020B	Total Recoverable
Cobalt	0.23	J	1.0	0.086	ug/L	1		6020B	Total Recoverable
Lithium	18		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	25000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	3000		1000	220	ug/L	1		6020B	Total Recoverable
Selenium	1.5	J	5.0	0.89	ug/L	1		6020B	Total Recoverable
Sodium	110000	^2	1000	880	ug/L	1		6020B	Total Recoverable
Thallium	0.61	J	1.0	0.51	ug/L	1		6020B	Total Recoverable
Total Alkalinity	260		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	260		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	560		20	16	mg/L	1		2540 C-2020	Total/NA
Chloride	12		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.13		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	220		5.0	1.7	mg/L	5		300.0	Total/NA

Client Sample ID: 2022-13-F-20250917-01
Lab Sample ID: 240-233485-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	320		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	1.2	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	630		5.0	0.77	ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: 2022-13-F-20250917-01 (Continued)

Lab Sample ID: 240-233485-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	33000		1000	250	ug/L	1		6020B	Total Recoverable
Cobalt	0.23	J	1.0	0.086	ug/L	1		6020B	Total Recoverable
Lithium	43		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	9400		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	47		5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	3500		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	1900000		10000	8800	ug/L	10		6020B	Total Recoverable
Total Alkalinity	170		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	170		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	4400		50	39	mg/L	1		2540 C-2020	Total/NA
Chloride	2800		25	3.2	mg/L	25		300.0	Total/NA
Fluoride	1.5		0.25	0.12	mg/L	5		300.0	Total/NA
Sulfate	6.2		5.0	1.7	mg/L	5		300.0	Total/NA

Client Sample ID: 94136-F-20250917-01

Lab Sample ID: 240-233485-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	380		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	3.9	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	110		5.0	0.77	ug/L	1		6020B	Total Recoverable
Cadmium	0.11	J	1.0	0.077	ug/L	1		6020B	Total Recoverable
Calcium	14000		1000	250	ug/L	1		6020B	Total Recoverable
Chromium	5.1		5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	0.34	J	1.0	0.086	ug/L	1		6020B	Total Recoverable
Lithium	26		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	3600		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	16		5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	2000		1000	220	ug/L	1		6020B	Total Recoverable
Selenium	1.2	J	5.0	0.89	ug/L	1		6020B	Total Recoverable
Sodium	760000		1000	880	ug/L	1		6020B	Total Recoverable
Total Alkalinity	330		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	330		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	1800		40	31	mg/L	1		2540 C-2020	Total/NA
Chloride	920		10	1.3	mg/L	10		300.0	Total/NA
Fluoride	1.5		0.10	0.048	mg/L	2		300.0	Total/NA
Sulfate	51		2.0	0.70	mg/L	2		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-233485-1

Client Sample ID: 9631-F-20250917-01

Lab Sample ID: 240-233485-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	370		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	4.1	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	37000		250	39	ug/L	50		6020B	Total Recoverable
Cadmium	0.13	J	1.0	0.077	ug/L	1		6020B	Total Recoverable
Calcium	1500000		50000	13000	ug/L	50		6020B	Total Recoverable
Chromium	6.3		5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	1.8		1.0	0.086	ug/L	1		6020B	Total Recoverable
Lithium	350		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	440000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	3.0	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	23000		1000	220	ug/L	1		6020B	Total Recoverable
Selenium	1.0	J	5.0	0.89	ug/L	1		6020B	Total Recoverable
Sodium	13000000		50000	44000	ug/L	50		6020B	Total Recoverable
Total Alkalinity	72		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	72		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	39000		1000	780	mg/L	1		2540 C-2020	Total/NA
Chloride	26000		1000	130	mg/L	1000		300.0	Total/NA

Client Sample ID: DUP-003-F-20250917-01

Lab Sample ID: 240-233485-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	400		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	3.4	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	39000		250	39	ug/L	50		6020B	Total Recoverable
Calcium	1600000		50000	13000	ug/L	50		6020B	Total Recoverable
Chromium	2.7	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	1.9		1.0	0.086	ug/L	1		6020B	Total Recoverable
Lithium	370		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	450000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	2.4	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	23000		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	11000000		50000	44000	ug/L	50		6020B	Total Recoverable
Total Alkalinity	75		5.0	2.6	mg/L	1		2320 B-2021	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DUP-003-F-20250917-01 (Continued)
Lab Sample ID: 240-233485-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bicarbonate Alkalinity as CaCO3	75		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	42000		1000	780	mg/L	1		2540 C-2020	Total/NA
Chloride	27000		1000	130	mg/L	1000		300.0	Total/NA

Client Sample ID: 2016-05-F-20250917-01
Lab Sample ID: 240-233485-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	100		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	1.7	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	50		5.0	0.77	ug/L	1		6020B	Total Recoverable
Calcium	48000		1000	250	ug/L	1		6020B	Total Recoverable
Chromium	2.9	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	0.36	J	1.0	0.086	ug/L	1		6020B	Total Recoverable
Lead	0.66	J	1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	10		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	22000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	1.5	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	2200		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	79000		1000	880	ug/L	1		6020B	Total Recoverable
Total Alkalinity	200		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	200		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	370		40	31	mg/L	1		2540 C-2020	Total/NA
Chloride	12		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.23		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	140		1.0	0.35	mg/L	1		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 2022-02-F-20250916-01
Date Collected: 09/16/25 10:44
Date Received: 09/20/25 08:00

Lab Sample ID: 240-233485-1
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	500		100	57	ug/L		09/22/25 14:00	09/24/25 00:03	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.1	J	2.0	0.57	ug/L		09/22/25 14:00	09/23/25 17:25	1
Arsenic	1.8	J	5.0	0.75	ug/L		09/22/25 14:00	09/23/25 17:25	1
Barium	640		5.0	0.77	ug/L		09/22/25 14:00	09/23/25 17:25	1
Beryllium	ND		1.0	0.27	ug/L		09/22/25 14:00	09/23/25 17:25	1
Cadmium	ND		1.0	0.077	ug/L		09/22/25 14:00	09/23/25 17:25	1
Calcium	30000		1000	250	ug/L		09/22/25 14:00	09/23/25 17:25	1
Chromium	320		5.0	1.2	ug/L		09/22/25 14:00	09/23/25 17:25	1
Cobalt	8.6		1.0	0.086	ug/L		09/22/25 14:00	09/23/25 17:25	1
Lead	1.3		1.0	0.45	ug/L		09/22/25 14:00	09/23/25 17:25	1
Lithium	50		8.0	3.4	ug/L		09/22/25 14:00	09/23/25 17:25	1
Magnesium	8400		1000	61	ug/L		09/22/25 14:00	09/23/25 17:25	1
Molybdenum	97		5.0	1.1	ug/L		09/22/25 14:00	09/23/25 17:25	1
Potassium	4500		1000	220	ug/L		09/22/25 14:00	09/23/25 17:25	1
Selenium	ND		5.0	0.89	ug/L		09/22/25 14:00	09/23/25 17:25	1
Sodium	1700000		10000	8800	ug/L		09/22/25 14:00	09/24/25 10:40	10
Thallium	ND		1.0	0.51	ug/L		09/22/25 14:00	09/23/25 17:25	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		09/22/25 14:00	09/23/25 12:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	300		5.0	2.6	mg/L			09/25/25 22:13	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	300		5.0	2.6	mg/L			09/25/25 22:13	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			09/25/25 22:13	1
Total Dissolved Solids (SM 2540 C-2020)	3900		50	39	mg/L			09/22/25 14:58	1
Chloride (EPA 300.0)	2300		20	2.6	mg/L			09/24/25 13:56	20
Fluoride (EPA 300.0)	1.7		0.25	0.12	mg/L			09/24/25 13:30	5
Sulfate (EPA 300.0)	69		5.0	1.7	mg/L			09/24/25 13:30	5

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.30		0.613	0.624	1.00	0.742	pCi/L	09/24/25 15:19	10/21/25 21:17	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*75.4*		*30 - 110*	*09/24/25 15:19*	*10/21/25 21:17*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.87	G	1.05	1.07	1.00	1.54	pCi/L	09/24/25 15:25	10/21/25 09:58	1

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-233485-1

Client Sample ID: 2022-02-F-20250916-01
Date Collected: 09/16/25 10:44
Date Received: 09/20/25 08:00

Lab Sample ID: 240-233485-1
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*75.4*		*30 - 110*	*09/24/25 15:25*	*10/21/25 09:58*	*1*
Y Carrier	*81.9*		*30 - 110*	*09/24/25 15:25*	*10/21/25 09:58*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**3.17**		1.22	1.24	5.00	1.54	pCi/L		10/22/25 12:32	1

Client Sample ID: 2022-03-F-20250916-01
Date Collected: 09/16/25 12:17
Date Received: 09/20/25 08:00

Lab Sample ID: 240-233485-2
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	430		100	57	ug/L		09/22/25 14:00	09/24/25 00:16	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		09/22/25 14:00	09/23/25 17:27	1
Arsenic	2.2	J	5.0	0.75	ug/L		09/22/25 14:00	09/23/25 17:27	1
Barium	910		5.0	0.77	ug/L		09/22/25 14:00	09/23/25 17:27	1
Beryllium	ND		1.0	0.27	ug/L		09/22/25 14:00	09/23/25 17:27	1
Cadmium	ND		1.0	0.077	ug/L		09/22/25 14:00	09/23/25 17:27	1
Calcium	330000		1000	250	ug/L		09/22/25 14:00	09/23/25 17:27	1
Chromium	1.7	J	5.0	1.2	ug/L		09/22/25 14:00	09/23/25 17:27	1
Cobalt	1.8		1.0	0.086	ug/L		09/22/25 14:00	09/23/25 17:27	1
Lead	ND		1.0	0.45	ug/L		09/22/25 14:00	09/23/25 17:27	1
Lithium	600		8.0	3.4	ug/L		09/22/25 14:00	09/23/25 17:27	1
Magnesium	110000		1000	61	ug/L		09/22/25 14:00	09/23/25 17:27	1
Molybdenum	150		5.0	1.1	ug/L		09/22/25 14:00	09/23/25 17:27	1
Potassium	22000		1000	220	ug/L		09/22/25 14:00	09/23/25 17:27	1
Selenium	1.3	J	5.0	0.89	ug/L		09/22/25 14:00	09/23/25 17:27	1
Sodium	7700000		10000	8800	ug/L		09/22/25 14:00	09/24/25 10:47	10
Thallium	ND		1.0	0.51	ug/L		09/22/25 14:00	09/23/25 17:27	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		09/22/25 14:00	09/23/25 12:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	350		5.0	2.6	mg/L			09/25/25 22:24	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	350		5.0	2.6	mg/L			09/25/25 22:24	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			09/25/25 22:24	1
Total Dissolved Solids (SM 2540 C-2020)	17000		1000	780	mg/L			09/22/25 14:58	1
Chloride (EPA 300.0)	14000		100	13	mg/L			09/24/25 12:36	100
Fluoride (EPA 300.0)	ND		5.0	2.4	mg/L			09/24/25 12:36	100
Sulfate (EPA 300.0)	440		100	35	mg/L			09/24/25 12:36	100

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.93		0.457	0.489	1.00	0.418	pCi/L	09/24/25 15:19	10/21/25 21:17	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.3*		*30 - 110*	*09/24/25 15:19*	*10/21/25 21:17*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	5.29		0.800	0.936	1.00	0.605	pCi/L	09/24/25 15:25	10/21/25 09:58	1

Client Sample ID: 2022-03-F-20250916-01
Date Collected: 09/16/25 12:17
Date Received: 09/20/25 08:00

Lab Sample ID: 240-233485-2
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.3*		*30 - 110*	*09/24/25 15:25*	*10/21/25 09:58*	*1*
Y Carrier	*74.8*		*30 - 110*	*09/24/25 15:25*	*10/21/25 09:58*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**7.22**		0.921	1.06	5.00	0.605	pCi/L		10/22/25 12:32	1

Client Sample ID: 9801-F-20250916-01
Date Collected: 09/16/25 14:10
Date Received: 09/20/25 08:00

Lab Sample ID: 240-233485-3
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	410		100	57	ug/L		09/22/25 14:00	09/24/25 00:21	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		09/22/25 14:00	09/23/25 17:35	1
Arsenic	1.4	J	5.0	0.75	ug/L		09/22/25 14:00	09/23/25 17:35	1
Barium	4800		5.0	0.77	ug/L		09/22/25 14:00	09/23/25 17:35	1
Beryllium	ND		1.0	0.27	ug/L		09/22/25 14:00	09/23/25 17:35	1
Cadmium	ND		1.0	0.077	ug/L		09/22/25 14:00	09/23/25 17:35	1
Calcium	210000		1000	250	ug/L		09/22/25 14:00	09/23/25 17:35	1
Chromium	ND		5.0	1.2	ug/L		09/22/25 14:00	09/23/25 17:35	1
Cobalt	1.1		1.0	0.086	ug/L		09/22/25 14:00	09/23/25 17:35	1
Lead	ND		1.0	0.45	ug/L		09/22/25 14:00	09/23/25 17:35	1
Lithium	120		8.0	3.4	ug/L		09/22/25 14:00	09/23/25 17:35	1
Magnesium	57000		1000	61	ug/L		09/22/25 14:00	09/23/25 17:35	1
Molybdenum	3.7	J	5.0	1.1	ug/L		09/22/25 14:00	09/23/25 17:35	1
Potassium	9400		1000	220	ug/L		09/22/25 14:00	09/23/25 17:35	1
Selenium	ND		5.0	0.89	ug/L		09/22/25 14:00	09/23/25 17:35	1
Sodium	4600000		10000	8800	ug/L		09/22/25 14:00	09/24/25 10:50	10
Thallium	ND		1.0	0.51	ug/L		09/22/25 14:00	09/23/25 17:35	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		09/22/25 14:00	09/23/25 12:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	130		5.0	2.6	mg/L			09/25/25 22:32	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	130		5.0	2.6	mg/L			09/25/25 22:32	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			09/25/25 22:32	1
Total Dissolved Solids (SM 2540 C-2020)	11000		1000	780	mg/L			09/22/25 14:58	1
Chloride (EPA 300.0)	8300		50	6.4	mg/L			09/24/25 14:31	50
Fluoride (EPA 300.0)	1.1		0.50	0.24	mg/L			09/24/25 14:22	10
Sulfate (EPA 300.0)	6.1	J	10	3.5	mg/L			09/24/25 14:22	10

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	3.12		0.486	0.561	1.00	0.250	pCi/L	09/24/25 15:19	10/21/25 22:48	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*101*		*30 - 110*	*09/24/25 15:19*	*10/21/25 22:48*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	6.44		0.816	1.01	1.00	0.650	pCi/L	09/24/25 15:25	10/21/25 09:58	1

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-233485-1

Client Sample ID: 9801-F-20250916-01
Date Collected: 09/16/25 14:10
Date Received: 09/20/25 08:00

Lab Sample ID: 240-233485-3
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*101*		*30 - 110*	*09/24/25 15:25*	*10/21/25 09:58*	*1*
Y Carrier	*77.4*		*30 - 110*	*09/24/25 15:25*	*10/21/25 09:58*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**9.56**		0.950	1.16	5.00	0.650	pCi/L		10/22/25 12:32	1

Client Sample ID: 9802-F-20250916-01
Date Collected: 09/16/25 14:54
Date Received: 09/20/25 08:00

Lab Sample ID: 240-233485-4
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	190		100	57	ug/L		09/22/25 14:00	09/24/25 00:25	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		09/22/25 14:00	09/23/25 17:38	1
Arsenic	0.85	J	5.0	0.75	ug/L		09/22/25 14:00	09/23/25 17:38	1
Barium	67		5.0	0.77	ug/L		09/22/25 14:00	09/23/25 17:38	1
Beryllium	ND		1.0	0.27	ug/L		09/22/25 14:00	09/23/25 17:38	1
Cadmium	ND		1.0	0.077	ug/L		09/22/25 14:00	09/23/25 17:38	1
Calcium	32000		1000	250	ug/L		09/22/25 14:00	09/23/25 17:38	1
Chromium	1.7	J	5.0	1.2	ug/L		09/22/25 14:00	09/23/25 17:38	1
Cobalt	0.65	J	1.0	0.086	ug/L		09/22/25 14:00	09/23/25 17:38	1
Lead	ND		1.0	0.45	ug/L		09/22/25 14:00	09/23/25 17:38	1
Lithium	13		8.0	3.4	ug/L		09/22/25 14:00	09/23/25 17:38	1
Magnesium	8800		1000	61	ug/L		09/22/25 14:00	09/23/25 17:38	1
Molybdenum	4.3	J	5.0	1.1	ug/L		09/22/25 14:00	09/23/25 17:38	1
Potassium	1500		1000	220	ug/L		09/22/25 14:00	09/23/25 17:38	1
Selenium	ND		5.0	0.89	ug/L		09/22/25 14:00	09/23/25 17:38	1
Sodium	280000		1000	880	ug/L		09/22/25 14:00	09/24/25 10:53	1
Thallium	ND		1.0	0.51	ug/L		09/22/25 14:00	09/23/25 17:38	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		09/22/25 14:00	09/23/25 12:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	570		5.0	2.6	mg/L			09/25/25 22:38	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	570		5.0	2.6	mg/L			09/25/25 22:38	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			09/25/25 22:38	1
Total Dissolved Solids (SM 2540 C-2020)	770		10	7.8	mg/L			09/22/25 14:58	1
Chloride (EPA 300.0)	38		1.0	0.13	mg/L			09/24/25 12:54	1
Fluoride (EPA 300.0)	0.98		0.050	0.024	mg/L			09/24/25 12:54	1
Sulfate (EPA 300.0)	63		1.0	0.35	mg/L			09/24/25 12:54	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.130	U	0.159	0.160	1.00	0.262	pCi/L	09/24/25 15:19	10/21/25 22:49	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.8*		*30 - 110*	*09/24/25 15:19*	*10/21/25 22:49*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.434	U	0.345	0.347	1.00	0.533	pCi/L	09/24/25 15:25	10/21/25 09:57	1

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-233485-1

Client Sample ID: 9802-F-20250916-01
Date Collected: 09/16/25 14:54
Date Received: 09/20/25 08:00

Lab Sample ID: 240-233485-4
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.8*		*30 - 110*	*09/24/25 15:25*	*10/21/25 09:57*	*1*
Y Carrier	*82.2*		*30 - 110*	*09/24/25 15:25*	*10/21/25 09:57*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.564**		0.380	0.382	5.00	0.533	pCi/L		10/22/25 12:32	1

Client Sample ID: 2022-12-F-20250917-01
Date Collected: 09/17/25 09:30
Date Received: 09/20/25 08:00

Lab Sample ID: 240-233485-5
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	81	J	100	57	ug/L		09/22/25 14:00	09/23/25 18:42	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		09/22/25 14:00	09/23/25 14:48	1
Arsenic	ND		5.0	0.75	ug/L		09/22/25 14:00	09/23/25 14:48	1
Barium	14		5.0	0.77	ug/L		09/22/25 14:00	09/23/25 14:48	1
Beryllium	ND		1.0	0.27	ug/L		09/22/25 14:00	09/23/25 14:48	1
Cadmium	0.15	J	1.0	0.077	ug/L		09/22/25 14:00	09/23/25 14:48	1
Calcium	83000		1000	250	ug/L		09/22/25 14:00	09/23/25 14:48	1
Chromium	ND		5.0	1.2	ug/L		09/22/25 14:00	09/23/25 14:48	1
Cobalt	0.23	J	1.0	0.086	ug/L		09/22/25 14:00	09/23/25 14:48	1
Lead	ND		1.0	0.45	ug/L		09/22/25 14:00	09/23/25 14:48	1
Lithium	18		8.0	3.4	ug/L		09/22/25 14:00	09/23/25 14:48	1
Magnesium	25000		1000	61	ug/L		09/22/25 14:00	09/23/25 14:48	1
Molybdenum	ND		5.0	1.1	ug/L		09/22/25 14:00	09/23/25 14:48	1
Potassium	3000		1000	220	ug/L		09/22/25 14:00	09/23/25 14:48	1
Selenium	1.5	J	5.0	0.89	ug/L		09/22/25 14:00	09/23/25 14:48	1
Sodium	110000	^2	1000	880	ug/L		09/22/25 14:00	09/23/25 14:48	1
Thallium	0.61	J	1.0	0.51	ug/L		09/22/25 14:00	09/23/25 14:48	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		09/22/25 12:00	09/23/25 10:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	260		5.0	2.6	mg/L			09/25/25 22:47	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	260		5.0	2.6	mg/L			09/25/25 22:47	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			09/25/25 22:47	1
Total Dissolved Solids (SM 2540 C-2020)	560		20	16	mg/L			09/22/25 14:58	1
Chloride (EPA 300.0)	12		1.0	0.13	mg/L			09/24/25 22:42	1
Fluoride (EPA 300.0)	0.13		0.050	0.024	mg/L			09/24/25 22:42	1
Sulfate (EPA 300.0)	220		5.0	1.7	mg/L			09/24/25 22:51	5

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0481	U	0.109	0.109	1.00	0.263	pCi/L	09/24/25 15:19	10/21/25 22:49	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.8*		*30 - 110*	*09/24/25 15:19*	*10/21/25 22:49*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.653		0.381	0.386	1.00	0.553	pCi/L	09/24/25 15:25	10/21/25 09:57	1

Client Sample ID: 2022-12-F-20250917-01
Date Collected: 09/17/25 09:30
Date Received: 09/20/25 08:00

Lab Sample ID: 240-233485-5
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.8*		*30 - 110*	*09/24/25 15:25*	*10/21/25 09:57*	*1*
Y Carrier	*84.1*		*30 - 110*	*09/24/25 15:25*	*10/21/25 09:57*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.605**		0.396	0.401	5.00	0.553	pCi/L		10/22/25 12:32	1

Client Sample ID: 2022-13-F-20250917-01
Date Collected: 09/17/25 10:33
Date Received: 09/20/25 08:00

Lab Sample ID: 240-233485-6
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	320		100	57	ug/L		09/22/25 14:00	09/23/25 18:55	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		09/22/25 14:00	09/23/25 14:50	1
Arsenic	1.2	J	5.0	0.75	ug/L		09/22/25 14:00	09/23/25 14:50	1
Barium	630		5.0	0.77	ug/L		09/22/25 14:00	09/23/25 14:50	1
Beryllium	ND		1.0	0.27	ug/L		09/22/25 14:00	09/23/25 14:50	1
Cadmium	ND		1.0	0.077	ug/L		09/22/25 14:00	09/23/25 14:50	1
Calcium	33000		1000	250	ug/L		09/22/25 14:00	09/23/25 14:50	1
Chromium	ND		5.0	1.2	ug/L		09/22/25 14:00	09/23/25 14:50	1
Cobalt	0.23	J	1.0	0.086	ug/L		09/22/25 14:00	09/23/25 14:50	1
Lead	ND		1.0	0.45	ug/L		09/22/25 14:00	09/23/25 14:50	1
Lithium	43		8.0	3.4	ug/L		09/22/25 14:00	09/23/25 14:50	1
Magnesium	9400		1000	61	ug/L		09/22/25 14:00	09/23/25 14:50	1
Molybdenum	47		5.0	1.1	ug/L		09/22/25 14:00	09/23/25 14:50	1
Potassium	3500		1000	220	ug/L		09/22/25 14:00	09/23/25 14:50	1
Selenium	ND		5.0	0.89	ug/L		09/22/25 14:00	09/23/25 14:50	1
Sodium	1900000		10000	8800	ug/L		09/22/25 14:00	09/23/25 17:02	10
Thallium	ND		1.0	0.51	ug/L		09/22/25 14:00	09/23/25 14:50	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		09/22/25 12:00	09/23/25 10:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	170		5.0	2.6	mg/L			09/25/25 23:22	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	170		5.0	2.6	mg/L			09/25/25 23:22	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			09/25/25 23:22	1
Total Dissolved Solids (SM 2540 C-2020)	4400		50	39	mg/L			09/22/25 14:58	1
Chloride (EPA 300.0)	2800		25	3.2	mg/L			09/25/25 00:18	25
Fluoride (EPA 300.0)	1.5		0.25	0.12	mg/L			09/25/25 00:10	5
Sulfate (EPA 300.0)	6.2		5.0	1.7	mg/L			09/25/25 00:10	5

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.541		0.256	0.260	1.00	0.309	pCi/L	09/24/25 15:19	10/21/25 22:50	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.4*		*30 - 110*	*09/24/25 15:19*	*10/21/25 22:50*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.797		0.390	0.397	1.00	0.539	pCi/L	09/24/25 15:25	10/21/25 09:57	1

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-233485-1

Client Sample ID: 2022-13-F-20250917-01
Date Collected: 09/17/25 10:33
Date Received: 09/20/25 08:00

Lab Sample ID: 240-233485-6
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.4*		*30 - 110*	*09/24/25 15:25*	*10/21/25 09:57*	*1*
Y Carrier	*83.4*		*30 - 110*	*09/24/25 15:25*	*10/21/25 09:57*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**1.34**		0.467	0.475	5.00	0.539	pCi/L		10/22/25 12:32	1

Client Sample ID: 94136-F-20250917-01

Date Collected: 09/17/25 12:46
Date Received: 09/20/25 08:00

Lab Sample ID: 240-233485-7

Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**380**		100	57	ug/L		09/22/25 14:00	09/23/25 18:20	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		09/22/25 14:00	09/23/25 14:18	1
Arsenic	**3.9**	**J**	5.0	0.75	ug/L		09/22/25 14:00	09/23/25 14:18	1
Barium	**110**		5.0	0.77	ug/L		09/22/25 14:00	09/23/25 14:18	1
Beryllium	ND		1.0	0.27	ug/L		09/22/25 14:00	09/23/25 14:18	1
Cadmium	**0.11**	**J**	1.0	0.077	ug/L		09/22/25 14:00	09/23/25 14:18	1
Calcium	**14000**		1000	250	ug/L		09/22/25 14:00	09/23/25 14:18	1
Chromium	**5.1**		5.0	1.2	ug/L		09/22/25 14:00	09/23/25 14:18	1
Cobalt	**0.34**	**J**	1.0	0.086	ug/L		09/22/25 14:00	09/23/25 14:18	1
Lead	ND		1.0	0.45	ug/L		09/22/25 14:00	09/23/25 14:18	1
Lithium	**26**		8.0	3.4	ug/L		09/22/25 14:00	09/23/25 14:18	1
Magnesium	**3600**		1000	61	ug/L		09/22/25 14:00	09/23/25 14:18	1
Molybdenum	**16**		5.0	1.1	ug/L		09/22/25 14:00	09/23/25 14:18	1
Potassium	**2000**		1000	220	ug/L		09/22/25 14:00	09/23/25 14:18	1
Selenium	**1.2**	**J**	5.0	0.89	ug/L		09/22/25 14:00	09/23/25 14:18	1
Sodium	**760000**		1000	880	ug/L		09/22/25 14:00	09/23/25 14:18	1
Thallium	ND		1.0	0.51	ug/L		09/22/25 14:00	09/23/25 14:18	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		09/22/25 12:00	09/23/25 10:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	**330**		5.0	2.6	mg/L			09/25/25 23:06	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**330**		5.0	2.6	mg/L			09/25/25 23:06	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			09/25/25 23:06	1
Total Dissolved Solids (SM 2540 C-2020)	**1800**		40	31	mg/L			09/22/25 14:58	1
Chloride (EPA 300.0)	**920**		10	1.3	mg/L			09/25/25 02:56	10
Fluoride (EPA 300.0)	**1.5**		0.10	0.048	mg/L			09/25/25 02:30	2
Sulfate (EPA 300.0)	**51**		2.0	0.70	mg/L			09/25/25 02:30	2

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.218	U	0.202	0.203	1.00	0.312	pCi/L	09/24/25 15:19	10/21/25 22:50	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.8*		*30 - 110*	*09/24/25 15:19*	*10/21/25 22:50*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.464	U	0.368	0.370	1.00	0.570	pCi/L	09/24/25 15:25	10/21/25 09:57	1

Client Sample ID: 94136-F-20250917-01
Date Collected: 09/17/25 12:46
Date Received: 09/20/25 08:00

Lab Sample ID: 240-233485-7
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.8*		*30 - 110*	*09/24/25 15:25*	*10/21/25 09:57*	*1*
Y Carrier	*81.1*		*30 - 110*	*09/24/25 15:25*	*10/21/25 09:57*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.682**		0.420	0.422	5.00	0.570	pCi/L		10/22/25 12:32	1

Client Sample ID: 9631-F-20250917-01
Date Collected: 09/17/25 14:39
Date Received: 09/20/25 08:00

Lab Sample ID: 240-233485-8
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**370**		100	57	ug/L		09/22/25 14:00	09/23/25 19:00	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		09/22/25 14:00	09/23/25 14:53	1
Arsenic	**4.1**	**J**	5.0	0.75	ug/L		09/22/25 14:00	09/23/25 14:53	1
Barium	**37000**		250	39	ug/L		09/22/25 14:00	09/23/25 17:04	50
Beryllium	ND		1.0	0.27	ug/L		09/22/25 14:00	09/23/25 14:53	1
Cadmium	**0.13**	**J**	1.0	0.077	ug/L		09/22/25 14:00	09/23/25 14:53	1
Calcium	**1500000**		50000	13000	ug/L		09/22/25 14:00	09/23/25 17:04	50
Chromium	**6.3**		5.0	1.2	ug/L		09/22/25 14:00	09/23/25 14:53	1
Cobalt	**1.8**		1.0	0.086	ug/L		09/22/25 14:00	09/23/25 14:53	1
Lead	ND		1.0	0.45	ug/L		09/22/25 14:00	09/23/25 14:53	1
Lithium	**350**		8.0	3.4	ug/L		09/22/25 14:00	09/23/25 14:53	1
Magnesium	**440000**		1000	61	ug/L		09/22/25 14:00	09/23/25 14:53	1
Molybdenum	**3.0**	**J**	5.0	1.1	ug/L		09/22/25 14:00	09/23/25 14:53	1
Potassium	**23000**		1000	220	ug/L		09/22/25 14:00	09/23/25 14:53	1
Selenium	**1.0**	**J**	5.0	0.89	ug/L		09/22/25 14:00	09/23/25 14:53	1
Sodium	**13000000**		50000	44000	ug/L		09/22/25 14:00	09/23/25 17:04	50
Thallium	ND		1.0	0.51	ug/L		09/22/25 14:00	09/23/25 14:53	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		09/22/25 12:00	09/23/25 11:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	**72**		5.0	2.6	mg/L			09/25/25 23:29	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**72**		5.0	2.6	mg/L			09/25/25 23:29	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			09/25/25 23:29	1
Total Dissolved Solids (SM 2540 C-2020)	**39000**		1000	780	mg/L			09/22/25 14:58	1
Chloride (EPA 300.0)	**26000**		1000	130	mg/L			09/25/25 00:36	1000
Fluoride (EPA 300.0)	ND		2.5	1.2	mg/L			09/25/25 00:27	50
Sulfate (EPA 300.0)	ND		50	17	mg/L			09/25/25 00:27	50

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**35.4**		1.86	3.69	1.00	0.397	pCi/L	09/24/25 15:19	10/21/25 22:51	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*158*	*X*	*30 - 110*	*09/24/25 15:19*	*10/21/25 22:51*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**66.3**		2.24	6.50	1.00	0.375	pCi/L	09/24/25 15:25	10/21/25 09:58	1

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-233485-1

Client Sample ID: 9631-F-20250917-01
Date Collected: 09/17/25 14:39
Date Received: 09/20/25 08:00

Lab Sample ID: 240-233485-8
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*158*	*X*	*30 - 110*	*09/24/25 15:25*	*10/21/25 09:58*	*1*
Y Carrier	*87.1*		*30 - 110*	*09/24/25 15:25*	*10/21/25 09:58*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**102**		2.91	7.47	5.00	0.397	pCi/L		10/22/25 12:32	1

Client Sample ID: DUP-003-F-20250917-01
Date Collected: 09/17/25 00:00
Date Received: 09/20/25 08:00

Lab Sample ID: 240-233485-9
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**400**		100	57	ug/L		09/22/25 14:00	09/23/25 19:05	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		09/22/25 14:00	09/23/25 14:56	1
Arsenic	**3.4**	**J**	5.0	0.75	ug/L		09/22/25 14:00	09/23/25 14:56	1
Barium	**39000**		250	39	ug/L		09/22/25 14:00	09/23/25 17:07	50
Beryllium	ND		1.0	0.27	ug/L		09/22/25 14:00	09/23/25 14:56	1
Cadmium	ND		1.0	0.077	ug/L		09/22/25 14:00	09/23/25 14:56	1
Calcium	**1600000**		50000	13000	ug/L		09/22/25 14:00	09/23/25 17:07	50
Chromium	**2.7**	**J**	5.0	1.2	ug/L		09/22/25 14:00	09/23/25 14:56	1
Cobalt	**1.9**		1.0	0.086	ug/L		09/22/25 14:00	09/23/25 14:56	1
Lead	ND		1.0	0.45	ug/L		09/22/25 14:00	09/23/25 14:56	1
Lithium	**370**		8.0	3.4	ug/L		09/22/25 14:00	09/23/25 14:56	1
Magnesium	**450000**		1000	61	ug/L		09/22/25 14:00	09/23/25 14:56	1
Molybdenum	**2.4**	**J**	5.0	1.1	ug/L		09/22/25 14:00	09/23/25 14:56	1
Potassium	**23000**		1000	220	ug/L		09/22/25 14:00	09/23/25 14:56	1
Selenium	ND		5.0	0.89	ug/L		09/22/25 14:00	09/23/25 14:56	1
Sodium	**11000000**		50000	44000	ug/L		09/22/25 14:00	09/23/25 17:07	50
Thallium	ND		1.0	0.51	ug/L		09/22/25 14:00	09/23/25 14:56	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		09/22/25 12:00	09/23/25 11:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	**75**		5.0	2.6	mg/L			09/25/25 23:37	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**75**		5.0	2.6	mg/L			09/25/25 23:37	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			09/25/25 23:37	1
Total Dissolved Solids (SM 2540 C-2020)	**42000**		1000	780	mg/L			09/22/25 14:58	1
Chloride (EPA 300.0)	**27000**		1000	130	mg/L			09/25/25 01:11	1000
Fluoride (EPA 300.0)	ND		2.5	1.2	mg/L			09/25/25 01:02	50
Sulfate (EPA 300.0)	ND		50	17	mg/L			09/25/25 01:02	50

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**38.3**		1.91	3.94	1.00	0.330	pCi/L	09/24/25 15:19	10/21/25 22:51	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*132*	*X*	*30 - 110*	*09/24/25 15:19*	*10/21/25 22:51*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**67.7**		2.42	6.68	1.00	0.587	pCi/L	09/24/25 15:25	10/21/25 09:58	1

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-233485-1

Client Sample ID: DUP-003-F-20250917-01
Date Collected: 09/17/25 00:00
Date Received: 09/20/25 08:00

Lab Sample ID: 240-233485-9
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*132*	*X*	*30 - 110*	*09/24/25 15:25*	*10/21/25 09:58*	*1*
Y Carrier	*79.3*		*30 - 110*	*09/24/25 15:25*	*10/21/25 09:58*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**106**		3.08	7.76	5.00	0.587	pCi/L		10/22/25 12:32	1

Client Sample ID: 2016-05-F-20250917-01
Date Collected: 09/17/25 11:50
Date Received: 09/20/25 08:00

Lab Sample ID: 240-233485-10
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**100**		100	57	ug/L		09/22/25 14:00	09/23/25 19:09	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		09/22/25 14:00	09/23/25 14:58	1
Arsenic	**1.7**	**J**	5.0	0.75	ug/L		09/22/25 14:00	09/23/25 14:58	1
Barium	**50**		5.0	0.77	ug/L		09/22/25 14:00	09/23/25 14:58	1
Beryllium	ND		1.0	0.27	ug/L		09/22/25 14:00	09/23/25 14:58	1
Cadmium	ND		1.0	0.077	ug/L		09/22/25 14:00	09/23/25 14:58	1
Calcium	**48000**		1000	250	ug/L		09/22/25 14:00	09/23/25 14:58	1
Chromium	**2.9**	**J**	5.0	1.2	ug/L		09/22/25 14:00	09/23/25 14:58	1
Cobalt	**0.36**	**J**	1.0	0.086	ug/L		09/22/25 14:00	09/23/25 14:58	1
Lead	**0.66**	**J**	1.0	0.45	ug/L		09/22/25 14:00	09/23/25 14:58	1
Lithium	**10**		8.0	3.4	ug/L		09/22/25 14:00	09/23/25 14:58	1
Magnesium	**22000**		1000	61	ug/L		09/22/25 14:00	09/23/25 14:58	1
Molybdenum	**1.5**	**J**	5.0	1.1	ug/L		09/22/25 14:00	09/23/25 14:58	1
Potassium	**2200**		1000	220	ug/L		09/22/25 14:00	09/23/25 14:58	1
Selenium	ND		5.0	0.89	ug/L		09/22/25 14:00	09/23/25 14:58	1
Sodium	**79000**		1000	880	ug/L		09/22/25 14:00	09/23/25 17:09	1
Thallium	ND		1.0	0.51	ug/L		09/22/25 14:00	09/23/25 14:58	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		09/22/25 12:00	09/23/25 11:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	**200**		5.0	2.6	mg/L			09/25/25 23:42	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**200**		5.0	2.6	mg/L			09/25/25 23:42	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			09/25/25 23:42	1
Total Dissolved Solids (SM 2540 C-2020)	**370**		40	31	mg/L			09/22/25 14:58	1
Chloride (EPA 300.0)	**12**		1.0	0.13	mg/L			09/25/25 03:22	1
Fluoride (EPA 300.0)	**0.23**		0.050	0.024	mg/L			09/25/25 03:22	1
Sulfate (EPA 300.0)	**140**		1.0	0.35	mg/L			09/25/25 03:22	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.113	U	0.148	0.148	1.00	0.246	pCi/L	09/24/25 15:19	10/21/25 22:51	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.2*		*30 - 110*	*09/24/25 15:19*	*10/21/25 22:51*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.426	U	0.330	0.332	1.00	0.509	pCi/L	09/24/25 15:25	10/21/25 09:58	1

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-233485-1

Client Sample ID: 2016-05-F-20250917-01
Date Collected: 09/17/25 11:50
Date Received: 09/20/25 08:00

Lab Sample ID: 240-233485-10
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.2*		*30 - 110*	*09/24/25 15:25*	*10/21/25 09:58*	*1*
Y Carrier	*86.0*		*30 - 110*	*09/24/25 15:25*	*10/21/25 09:58*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.540**		0.362	0.363	5.00	0.509	pCi/L		10/22/25 12:32	1

Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-233485-1

Method: 9315 - Radium 226 by GFPC

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)						
		Ba						
Lab Sample ID	Client Sample ID	(30-110)						
240-233485-1	2022-02-F-20250916-01	75.4						
240-233485-2	2022-03-F-20250916-01	87.3						
240-233485-3	9801-F-20250916-01	101						
240-233485-4	9802-F-20250916-01	89.8						
240-233485-5	2022-12-F-20250917-01	88.8						
240-233485-6	2022-13-F-20250917-01	90.4						
240-233485-7	94136-F-20250917-01	88.8						
240-233485-7 MS	94136-F-20250917-01	94.2						
240-233485-7 MSD	94136-F-20250917-01	78.4						
240-233485-8	9631-F-20250917-01	158 X						
240-233485-9	DUP-003-F-20250917-01	132 X						
240-233485-10	2016-05-F-20250917-01	94.2						
LCS 160-737502/2-A	Lab Control Sample	87.8						
MB 160-737502/1-A	Method Blank	77.7						

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	(30-110)	(30-110)					
240-233485-1	2022-02-F-20250916-01	75.4	81.9					
240-233485-2	2022-03-F-20250916-01	87.3	74.8					
240-233485-3	9801-F-20250916-01	101	77.4					
240-233485-4	9802-F-20250916-01	89.8	82.2					
240-233485-5	2022-12-F-20250917-01	88.8	84.1					
240-233485-6	2022-13-F-20250917-01	90.4	83.4					
240-233485-7	94136-F-20250917-01	88.8	81.1					
240-233485-7 MS	94136-F-20250917-01	94.2	81.5					
240-233485-7 MSD	94136-F-20250917-01	78.4	75.9					
240-233485-8	9631-F-20250917-01	158 X	87.1					
240-233485-9	DUP-003-F-20250917-01	132 X	79.3					
240-233485-10	2016-05-F-20250917-01	94.2	86.0					
LCS 160-737503/2-A	Lab Control Sample	87.8	78.9					
MB 160-737503/1-A	Method Blank	77.7	82.6					

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-672662/1-A
Matrix: Water
Analysis Batch: 672913

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 672662

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		09/22/25 14:00	09/23/25 18:11	1

Lab Sample ID: LCS 240-672662/2-A
Matrix: Water
Analysis Batch: 672913

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 672662

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1000	1010		ug/L		101	80 - 120

Lab Sample ID: 240-233485-7 MS
Matrix: Water
Analysis Batch: 672913

Client Sample ID: 94136-F-20250917-01
Prep Type: Total Recoverable
Prep Batch: 672662

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	380		1000	1440		ug/L		106	75 - 125

Lab Sample ID: 240-233485-7 MSD
Matrix: Water
Analysis Batch: 672913

Client Sample ID: 94136-F-20250917-01
Prep Type: Total Recoverable
Prep Batch: 672662

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	380		1000	1470		ug/L		109	75 - 125	2	20

Lab Sample ID: MB 240-672724/1-A
Matrix: Water
Analysis Batch: 672913

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 672724

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		09/22/25 14:00	09/23/25 22:57	1

Lab Sample ID: LCS 240-672724/2-A
Matrix: Water
Analysis Batch: 672913

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 672724

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1000	1030		ug/L		103	80 - 120

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-672662/1-A
Matrix: Water
Analysis Batch: 672980

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 672662

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		09/22/25 14:00	09/23/25 15:48	1
Arsenic	ND		5.0	0.75	ug/L		09/22/25 14:00	09/23/25 15:48	1
Barium	ND		5.0	0.77	ug/L		09/22/25 14:00	09/23/25 15:48	1
Beryllium	ND		1.0	0.27	ug/L		09/22/25 14:00	09/23/25 15:48	1
Cadmium	ND		1.0	0.077	ug/L		09/22/25 14:00	09/23/25 15:48	1
Calcium	ND		1000	250	ug/L		09/22/25 14:00	09/23/25 15:48	1

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

Lab Sample ID: MB 240-672662/1-A
Matrix: Water
Analysis Batch: 672980

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 672662

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		5.0	1.2	ug/L		09/22/25 14:00	09/23/25 15:48	1
Cobalt	ND		1.0	0.086	ug/L		09/22/25 14:00	09/23/25 15:48	1
Lead	ND		1.0	0.45	ug/L		09/22/25 14:00	09/23/25 15:48	1
Lithium	ND		8.0	3.4	ug/L		09/22/25 14:00	09/23/25 15:48	1
Magnesium	ND		1000	61	ug/L		09/22/25 14:00	09/23/25 15:48	1
Molybdenum	ND		5.0	1.1	ug/L		09/22/25 14:00	09/23/25 15:48	1
Potassium	ND		1000	220	ug/L		09/22/25 14:00	09/23/25 15:48	1
Selenium	ND		5.0	0.89	ug/L		09/22/25 14:00	09/23/25 15:48	1
Sodium	ND	^+	1000	880	ug/L		09/22/25 14:00	09/23/25 15:48	1
Thallium	ND		1.0	0.51	ug/L		09/22/25 14:00	09/23/25 15:48	1

Lab Sample ID: LCS 240-672662/27-A
Matrix: Water
Analysis Batch: 672980

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 672662

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	104		ug/L		104	80 - 120
Arsenic	1000	1050		ug/L		105	80 - 120
Barium	1000	1030		ug/L		103	80 - 120
Beryllium	500	495		ug/L		99	80 - 120
Cadmium	500	492		ug/L		98	80 - 120
Calcium	25000	25400		ug/L		102	80 - 120
Chromium	500	494		ug/L		99	80 - 120
Cobalt	500	534		ug/L		107	80 - 120
Lead	500	521		ug/L		104	80 - 120
Lithium	500	537		ug/L		107	80 - 120
Magnesium	25000	25700		ug/L		103	80 - 120
Molybdenum	500	522		ug/L		104	80 - 120
Potassium	25000	25900		ug/L		104	80 - 120
Selenium	1000	1000		ug/L		100	80 - 120
Sodium	25000	25800		ug/L		103	80 - 120
Thallium	1000	1050		ug/L		105	80 - 120

Lab Sample ID: 240-233485-7 MS
Matrix: Water
Analysis Batch: 672980

Client Sample ID: 94136-F-20250917-01
Prep Type: Total Recoverable
Prep Batch: 672662

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	ND		100	95.3		ug/L		95	80 - 120
Arsenic	3.9	J	1000	1080		ug/L		107	80 - 120
Barium	110		1000	1160		ug/L		105	80 - 120
Beryllium	ND		500	494		ug/L		99	80 - 120
Cadmium	0.11	J	500	493		ug/L		99	80 - 120
Calcium	14000		25000	40400		ug/L		105	80 - 120
Chromium	5.1		500	525		ug/L		104	80 - 120
Cobalt	0.34	J	500	536		ug/L		107	80 - 120
Lead	ND		500	513		ug/L		103	80 - 120
Lithium	26		500	573		ug/L		109	80 - 120
Magnesium	3600		25000	29900		ug/L		105	80 - 120

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

Lab Sample ID: 240-233485-7 MS
Matrix: Water
Analysis Batch: 672980

Client Sample ID: 94136-F-20250917-01
Prep Type: Total Recoverable
Prep Batch: 672662

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Molybdenum	16		500	555		ug/L		108	80 - 120
Potassium	2000		25000	29200		ug/L		109	80 - 120
Selenium	1.2	J	1000	980		ug/L		98	80 - 120
Sodium	760000		25000	775000	4	ug/L		64	80 - 120
Thallium	ND		1000	1040		ug/L		104	80 - 120

Lab Sample ID: 240-233485-7 MSD
Matrix: Water
Analysis Batch: 672980

Client Sample ID: 94136-F-20250917-01
Prep Type: Total Recoverable
Prep Batch: 672662

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	ND		100	106		ug/L		106	80 - 120	10	20
Arsenic	3.9	J	1000	1070		ug/L		107	80 - 120	1	20
Barium	110		1000	1150		ug/L		104	80 - 120	1	20
Beryllium	ND		500	496		ug/L		99	80 - 120	0	20
Cadmium	0.11	J	500	488		ug/L		98	80 - 120	1	20
Calcium	14000		25000	39700		ug/L		102	80 - 120	2	20
Chromium	5.1		500	519		ug/L		103	80 - 120	1	20
Cobalt	0.34	J	500	537		ug/L		107	80 - 120	0	20
Lead	ND		500	506		ug/L		101	80 - 120	1	20
Lithium	26		500	577		ug/L		110	80 - 120	1	20
Magnesium	3600		25000	29200		ug/L		102	80 - 120	2	20
Molybdenum	16		500	548		ug/L		106	80 - 120	1	20
Potassium	2000		25000	28300		ug/L		105	80 - 120	3	20
Selenium	1.2	J	1000	989		ug/L		99	80 - 120	1	20
Sodium	760000		25000	789000	4	ug/L		117	80 - 120	2	20
Thallium	ND		1000	1030		ug/L		103	80 - 120	1	20

Lab Sample ID: MB 240-672724/1-A
Matrix: Water
Analysis Batch: 672975

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 672724

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		09/22/25 14:00	09/23/25 16:38	1
Arsenic	ND		5.0	0.75	ug/L		09/22/25 14:00	09/23/25 16:38	1
Barium	ND		5.0	0.77	ug/L		09/22/25 14:00	09/23/25 16:38	1
Beryllium	ND		1.0	0.27	ug/L		09/22/25 14:00	09/23/25 16:38	1
Cadmium	ND		1.0	0.077	ug/L		09/22/25 14:00	09/23/25 16:38	1
Calcium	ND		1000	250	ug/L		09/22/25 14:00	09/23/25 16:38	1
Chromium	ND		5.0	1.2	ug/L		09/22/25 14:00	09/23/25 16:38	1
Cobalt	ND		1.0	0.086	ug/L		09/22/25 14:00	09/23/25 16:38	1
Lead	ND		1.0	0.45	ug/L		09/22/25 14:00	09/23/25 16:38	1
Lithium	ND		8.0	3.4	ug/L		09/22/25 14:00	09/23/25 16:38	1
Magnesium	ND		1000	61	ug/L		09/22/25 14:00	09/23/25 16:38	1
Molybdenum	ND		5.0	1.1	ug/L		09/22/25 14:00	09/23/25 16:38	1
Potassium	ND		1000	220	ug/L		09/22/25 14:00	09/23/25 16:38	1
Selenium	ND		5.0	0.89	ug/L		09/22/25 14:00	09/23/25 16:38	1
Sodium	ND		1000	880	ug/L		09/22/25 14:00	09/23/25 16:38	1
Thallium	ND		1.0	0.51	ug/L		09/22/25 14:00	09/23/25 16:38	1

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

Lab Sample ID: LCS 240-672724/3-A
Matrix: Water
Analysis Batch: 672975

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 672724

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Antimony			100	101		ug/L		101	80 - 120		
Arsenic			1000	1030		ug/L		103	80 - 120		
Barium			1000	987		ug/L		99	80 - 120		
Beryllium			500	523		ug/L		105	80 - 120		
Cadmium			500	477		ug/L		95	80 - 120		
Calcium			25000	26200		ug/L		105	80 - 120		
Chromium			500	520		ug/L		104	80 - 120		
Cobalt			500	509		ug/L		102	80 - 120		
Lead			500	512		ug/L		102	80 - 120		
Lithium			500	524		ug/L		105	80 - 120		
Magnesium			25000	25900		ug/L		104	80 - 120		
Molybdenum			500	503		ug/L		101	80 - 120		
Potassium			25000	26300		ug/L		105	80 - 120		
Selenium			1000	988		ug/L		99	80 - 120		
Sodium			25000	26100		ug/L		104	80 - 120		
Thallium			1000	1010		ug/L		101	80 - 120		

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-672669/1-A
Matrix: Water
Analysis Batch: 672955

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 672669

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		09/22/25 12:00	09/23/25 10:49	1

Lab Sample ID: LCS 240-672669/2-A
Matrix: Water
Analysis Batch: 672955

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 672669

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			5.00	4.88		ug/L		98	80 - 120		

Lab Sample ID: 240-233485-7 MS
Matrix: Water
Analysis Batch: 672955

Client Sample ID: 94136-F-20250917-01
Prep Type: Total/NA
Prep Batch: 672669

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	ND		1.00	1.00		ug/L		100	80 - 120		

Lab Sample ID: 240-233485-7 MSD
Matrix: Water
Analysis Batch: 672955

Client Sample ID: 94136-F-20250917-01
Prep Type: Total/NA
Prep Batch: 672669

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		1.00	1.01		ug/L		101	80 - 120	1	20

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: MB 240-672734/1-A
Matrix: Water
Analysis Batch: 672955

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 672734

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		09/22/25 14:00	09/23/25 12:09	1

Lab Sample ID: LCS 240-672734/2-A
Matrix: Water
Analysis Batch: 672955

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 672734

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	4.68		ug/L		94	80 - 120

Method: 2320 B-2021 - Alkalinity

Lab Sample ID: MB 240-673436/30
Matrix: Water
Analysis Batch: 673436

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	ND		5.0	2.6	mg/L			09/25/25 23:02	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			09/25/25 23:02	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			09/25/25 23:02	1

Lab Sample ID: MB 240-673436/4
Matrix: Water
Analysis Batch: 673436

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	ND		5.0	2.6	mg/L			09/25/25 20:04	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			09/25/25 20:04	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			09/25/25 20:04	1

Lab Sample ID: LCS 240-673436/29
Matrix: Water
Analysis Batch: 673436

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	280	256		mg/L		91	86 - 123

Lab Sample ID: LCS 240-673436/3
Matrix: Water
Analysis Batch: 673436

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	280	250		mg/L		89	86 - 123

Lab Sample ID: 240-233485-7 DU
Matrix: Water
Analysis Batch: 673436

Client Sample ID: 94136-F-20250917-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity	330		328		mg/L		0.6	20
Bicarbonate Alkalinity as CaCO3	330		328		mg/L		0.6	20

Method: 2320 B-2021 - Alkalinity (Continued)

Lab Sample ID: 240-233485-7 DU
Matrix: Water
Analysis Batch: 673436

Client Sample ID: 94136-F-20250917-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	20

Method: 2540 C-2020 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 240-672757/1
Matrix: Water
Analysis Batch: 672757

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	ND		10	7.8	mg/L			09/22/25 14:58	1

Lab Sample ID: LCS 240-672757/2
Matrix: Water
Analysis Batch: 672757

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	176	153		mg/L		87	80 - 120

Lab Sample ID: 240-233485-7 DU
Matrix: Water
Analysis Batch: 672757

Client Sample ID: 94136-F-20250917-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	1800		1770		mg/L		1	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-672948/3
Matrix: Water
Analysis Batch: 672948

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.13	mg/L			09/24/25 06:55	1
Fluoride	ND		0.050	0.024	mg/L			09/24/25 06:55	1
Sulfate	ND		1.0	0.35	mg/L			09/24/25 06:55	1

Lab Sample ID: LCS 240-672948/4
Matrix: Water
Analysis Batch: 672948

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	49.4		mg/L		99	90 - 110
Fluoride	2.50	2.53		mg/L		101	90 - 110
Sulfate	50.0	49.3		mg/L		99	90 - 110

Lab Sample ID: MB 240-673128/3
Matrix: Water
Analysis Batch: 673128

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.13	mg/L			09/24/25 18:10	1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 240-673128/3
Matrix: Water
Analysis Batch: 673128

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.050	0.024	mg/L			09/24/25 18:10	1
Sulfate	ND		1.0	0.35	mg/L			09/24/25 18:10	1

Lab Sample ID: LCS 240-673128/4
Matrix: Water
Analysis Batch: 673128

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			50.0	49.2		mg/L		98	90 - 110		
Fluoride			2.50	2.52		mg/L		101	90 - 110		
Sulfate			50.0	49.2		mg/L		98	90 - 110		

Lab Sample ID: MB 240-673156/3
Matrix: Water
Analysis Batch: 673156

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.13	mg/L			09/25/25 02:12	1
Fluoride	ND		0.050	0.024	mg/L			09/25/25 02:12	1
Sulfate	ND		1.0	0.35	mg/L			09/25/25 02:12	1

Lab Sample ID: LCS 240-673156/4
Matrix: Water
Analysis Batch: 673156

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			50.0	49.3		mg/L		99	90 - 110		
Fluoride			2.50	2.53		mg/L		101	90 - 110		
Sulfate			50.0	49.3		mg/L		99	90 - 110		

Lab Sample ID: 240-233485-7 MS
Matrix: Water
Analysis Batch: 673156

Client Sample ID: 94136-F-20250917-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Fluoride	1.5		5.00	6.33		mg/L		97	80 - 120		
Sulfate	51		100	143		mg/L		92	80 - 120		

Lab Sample ID: 240-233485-7 MS
Matrix: Water
Analysis Batch: 673156

Client Sample ID: 94136-F-20250917-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	920		500	1360		mg/L		88	80 - 120		

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 240-233485-7 MSD
Matrix: Water
Analysis Batch: 673156

Client Sample ID: 94136-F-20250917-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluoride	1.5		5.00	6.36		mg/L		97	80 - 120	1	15
Sulfate	51		100	144		mg/L		93	80 - 120	1	15

Lab Sample ID: 240-233485-7 MSD
Matrix: Water
Analysis Batch: 673156

Client Sample ID: 94136-F-20250917-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	920		500	1350		mg/L		85	80 - 120	1	15

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-737502/1-A
Matrix: Water
Analysis Batch: 741557

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 737502

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.01892	U	0.205	0.205	1.00	0.415	pCi/L	09/24/25 15:19	10/21/25 21:16	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*77.7*		*30 - 110*	*09/24/25 15:19*	*10/21/25 21:16*	*1*

Lab Sample ID: LCS 160-737502/2-A
Matrix: Water
Analysis Batch: 741557

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 737502

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-226			9.57	9.693		1.27	1.00	0.348	pCi/L	101	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*87.8*		*30 - 110*

Lab Sample ID: 240-233485-7 MS
Matrix: Water
Analysis Batch: 741550

Client Sample ID: 94136-F-20250917-01
Prep Type: Total/NA
Prep Batch: 737502

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-226	0.218	U	9.50	8.686		1.13	1.00	0.236	pCi/L	89	60 - 140		

Carrier	*MS %Yield*	*MS Qualifier*	*Limits*
Ba Carrier	*94.2*		*30 - 110*

Method: 9315 - Radium 226 by GFPC (Continued)

Lab Sample ID: 240-233485-7 MSD
Matrix: Water
Analysis Batch: 741550

Client Sample ID: 94136-F-20250917-01
Prep Type: Total/NA
Prep Batch: 737502

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	0.218	U	9.54	8.293		1.15	1.00	0.297	pCi/L	85	60 - 140	0.17	1

Carrier	*MSD %Yield*	*MSD Qualifier*	*Limits*
Ba Carrier	*78.4*		*30 - 110*

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-737503/1-A
Matrix: Water
Analysis Batch: 741557

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 737503

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.8615		0.458	0.465	1.00	0.652	pCi/L	09/24/25 15:25	10/21/25 09:57	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*77.7*		*30 - 110*	*09/24/25 15:25*	*10/21/25 09:57*	*1*
Y Carrier	*82.6*		*30 - 110*	*09/24/25 15:25*	*10/21/25 09:57*	*1*

Lab Sample ID: LCS 160-737503/2-A
Matrix: Water
Analysis Batch: 741557

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 737503

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228			7.99	8.247		1.22	1.00	0.650	pCi/L	103	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*87.8*		*30 - 110*
Y Carrier	*78.9*		*30 - 110*

Lab Sample ID: 240-233485-7 MS
Matrix: Water
Analysis Batch: 741558

Client Sample ID: 94136-F-20250917-01
Prep Type: Total/NA
Prep Batch: 737503

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228	0.464	U	7.93	8.003		1.14	1.00	0.531	pCi/L	95	60 - 140		

Carrier	*MS %Yield*	*MS Qualifier*	*Limits*
Ba Carrier	*94.2*		*30 - 110*
Y Carrier	*81.5*		*30 - 110*

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

Lab Sample ID: 240-233485-7 MSD
Matrix: Water
Analysis Batch: 741558

Client Sample ID: 94136-F-20250917-01
Prep Type: Total/NA
Prep Batch: 737503

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	0.464	U	7.97	10.07		1.43	1.00	0.595	pCi/L	121	60 - 140	0.80	1

Carrier	*MSD %Yield*	*MSD Qualifier*	*Limits*
Ba Carrier	*78.4*		*30 - 110*
Y Carrier	*75.9*		*30 - 110*

Metals

Prep Batch: 672662

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233485-5	2022-12-F-20250917-01	Total Recoverable	Water	3005A	
240-233485-6	2022-13-F-20250917-01	Total Recoverable	Water	3005A	
240-233485-7	94136-F-20250917-01	Total Recoverable	Water	3005A	
240-233485-8	9631-F-20250917-01	Total Recoverable	Water	3005A	
240-233485-9	DUP-003-F-20250917-01	Total Recoverable	Water	3005A	
240-233485-10	2016-05-F-20250917-01	Total Recoverable	Water	3005A	
MB 240-672662/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-672662/27-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-672662/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
240-233485-7 MS	94136-F-20250917-01	Total Recoverable	Water	3005A	
240-233485-7 MS	94136-F-20250917-01	Total Recoverable	Water	3005A	
240-233485-7 MSD	94136-F-20250917-01	Total Recoverable	Water	3005A	
240-233485-7 MSD	94136-F-20250917-01	Total Recoverable	Water	3005A	

Prep Batch: 672669

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233485-5	2022-12-F-20250917-01	Total/NA	Water	7470A	
240-233485-6	2022-13-F-20250917-01	Total/NA	Water	7470A	
240-233485-7	94136-F-20250917-01	Total/NA	Water	7470A	
240-233485-8	9631-F-20250917-01	Total/NA	Water	7470A	
240-233485-9	DUP-003-F-20250917-01	Total/NA	Water	7470A	
240-233485-10	2016-05-F-20250917-01	Total/NA	Water	7470A	
MB 240-672669/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-672669/2-A	Lab Control Sample	Total/NA	Water	7470A	
240-233485-7 MS	94136-F-20250917-01	Total/NA	Water	7470A	
240-233485-7 MSD	94136-F-20250917-01	Total/NA	Water	7470A	

Prep Batch: 672724

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233485-1	2022-02-F-20250916-01	Total Recoverable	Water	3005A	
240-233485-2	2022-03-F-20250916-01	Total Recoverable	Water	3005A	
240-233485-3	9801-F-20250916-01	Total Recoverable	Water	3005A	
240-233485-4	9802-F-20250916-01	Total Recoverable	Water	3005A	
MB 240-672724/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-672724/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-672724/3-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 672734

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233485-1	2022-02-F-20250916-01	Total/NA	Water	7470A	
240-233485-2	2022-03-F-20250916-01	Total/NA	Water	7470A	
240-233485-3	9801-F-20250916-01	Total/NA	Water	7470A	
240-233485-4	9802-F-20250916-01	Total/NA	Water	7470A	
MB 240-672734/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-672734/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 672913

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233485-1	2022-02-F-20250916-01	Total Recoverable	Water	6010D	672724
240-233485-2	2022-03-F-20250916-01	Total Recoverable	Water	6010D	672724
240-233485-3	9801-F-20250916-01	Total Recoverable	Water	6010D	672724

Metals (Continued)

Analysis Batch: 672913 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233485-4	9802-F-20250916-01	Total Recoverable	Water	6010D	672724
240-233485-5	2022-12-F-20250917-01	Total Recoverable	Water	6010D	672662
240-233485-6	2022-13-F-20250917-01	Total Recoverable	Water	6010D	672662
240-233485-7	94136-F-20250917-01	Total Recoverable	Water	6010D	672662
240-233485-8	9631-F-20250917-01	Total Recoverable	Water	6010D	672662
240-233485-9	DUP-003-F-20250917-01	Total Recoverable	Water	6010D	672662
240-233485-10	2016-05-F-20250917-01	Total Recoverable	Water	6010D	672662
MB 240-672662/1-A	Method Blank	Total Recoverable	Water	6010D	672662
MB 240-672724/1-A	Method Blank	Total Recoverable	Water	6010D	672724
LCS 240-672662/2-A	Lab Control Sample	Total Recoverable	Water	6010D	672662
LCS 240-672724/2-A	Lab Control Sample	Total Recoverable	Water	6010D	672724
240-233485-7 MS	94136-F-20250917-01	Total Recoverable	Water	6010D	672662
240-233485-7 MSD	94136-F-20250917-01	Total Recoverable	Water	6010D	672662

Analysis Batch: 672955

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233485-1	2022-02-F-20250916-01	Total/NA	Water	7470A	672734
240-233485-2	2022-03-F-20250916-01	Total/NA	Water	7470A	672734
240-233485-3	9801-F-20250916-01	Total/NA	Water	7470A	672734
240-233485-4	9802-F-20250916-01	Total/NA	Water	7470A	672734
240-233485-5	2022-12-F-20250917-01	Total/NA	Water	7470A	672669
240-233485-6	2022-13-F-20250917-01	Total/NA	Water	7470A	672669
240-233485-7	94136-F-20250917-01	Total/NA	Water	7470A	672669
240-233485-8	9631-F-20250917-01	Total/NA	Water	7470A	672669
240-233485-9	DUP-003-F-20250917-01	Total/NA	Water	7470A	672669
240-233485-10	2016-05-F-20250917-01	Total/NA	Water	7470A	672669
MB 240-672669/1-A	Method Blank	Total/NA	Water	7470A	672669
MB 240-672734/1-A	Method Blank	Total/NA	Water	7470A	672734
LCS 240-672669/2-A	Lab Control Sample	Total/NA	Water	7470A	672669
LCS 240-672734/2-A	Lab Control Sample	Total/NA	Water	7470A	672734
240-233485-7 MS	94136-F-20250917-01	Total/NA	Water	7470A	672669
240-233485-7 MSD	94136-F-20250917-01	Total/NA	Water	7470A	672669

Analysis Batch: 672975

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233485-1	2022-02-F-20250916-01	Total Recoverable	Water	6020B	672724
240-233485-2	2022-03-F-20250916-01	Total Recoverable	Water	6020B	672724
240-233485-3	9801-F-20250916-01	Total Recoverable	Water	6020B	672724
240-233485-4	9802-F-20250916-01	Total Recoverable	Water	6020B	672724
MB 240-672724/1-A	Method Blank	Total Recoverable	Water	6020B	672724
LCS 240-672724/3-A	Lab Control Sample	Total Recoverable	Water	6020B	672724

Analysis Batch: 672980

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233485-5	2022-12-F-20250917-01	Total Recoverable	Water	6020B	672662
240-233485-6	2022-13-F-20250917-01	Total Recoverable	Water	6020B	672662
240-233485-6	2022-13-F-20250917-01	Total Recoverable	Water	6020B	672662
240-233485-7	94136-F-20250917-01	Total Recoverable	Water	6020B	672662
240-233485-8	9631-F-20250917-01	Total Recoverable	Water	6020B	672662
240-233485-8	9631-F-20250917-01	Total Recoverable	Water	6020B	672662
240-233485-9	DUP-003-F-20250917-01	Total Recoverable	Water	6020B	672662

Metals (Continued)

Analysis Batch: 672980 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233485-9	DUP-003-F-20250917-01	Total Recoverable	Water	6020B	672662
240-233485-10	2016-05-F-20250917-01	Total Recoverable	Water	6020B	672662
240-233485-10	2016-05-F-20250917-01	Total Recoverable	Water	6020B	672662
MB 240-672662/1-A	Method Blank	Total Recoverable	Water	6020B	672662
LCS 240-672662/27-A	Lab Control Sample	Total Recoverable	Water	6020B	672662
240-233485-7 MS	94136-F-20250917-01	Total Recoverable	Water	6020B	672662
240-233485-7 MSD	94136-F-20250917-01	Total Recoverable	Water	6020B	672662

Analysis Batch: 673142

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233485-1	2022-02-F-20250916-01	Total Recoverable	Water	6020B	672724
240-233485-2	2022-03-F-20250916-01	Total Recoverable	Water	6020B	672724
240-233485-3	9801-F-20250916-01	Total Recoverable	Water	6020B	672724
240-233485-4	9802-F-20250916-01	Total Recoverable	Water	6020B	672724

General Chemistry

Analysis Batch: 672757

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233485-1	2022-02-F-20250916-01	Total/NA	Water	2540 C-2020	
240-233485-2	2022-03-F-20250916-01	Total/NA	Water	2540 C-2020	
240-233485-3	9801-F-20250916-01	Total/NA	Water	2540 C-2020	
240-233485-4	9802-F-20250916-01	Total/NA	Water	2540 C-2020	
240-233485-5	2022-12-F-20250917-01	Total/NA	Water	2540 C-2020	
240-233485-6	2022-13-F-20250917-01	Total/NA	Water	2540 C-2020	
240-233485-7	94136-F-20250917-01	Total/NA	Water	2540 C-2020	
240-233485-8	9631-F-20250917-01	Total/NA	Water	2540 C-2020	
240-233485-9	DUP-003-F-20250917-01	Total/NA	Water	2540 C-2020	
240-233485-10	2016-05-F-20250917-01	Total/NA	Water	2540 C-2020	
MB 240-672757/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-672757/2	Lab Control Sample	Total/NA	Water	2540 C-2020	
240-233485-7 DU	94136-F-20250917-01	Total/NA	Water	2540 C-2020	

Analysis Batch: 672948

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233485-1	2022-02-F-20250916-01	Total/NA	Water	300.0	
240-233485-1	2022-02-F-20250916-01	Total/NA	Water	300.0	
240-233485-2	2022-03-F-20250916-01	Total/NA	Water	300.0	
240-233485-3	9801-F-20250916-01	Total/NA	Water	300.0	
240-233485-3	9801-F-20250916-01	Total/NA	Water	300.0	
240-233485-4	9802-F-20250916-01	Total/NA	Water	300.0	
MB 240-672948/3	Method Blank	Total/NA	Water	300.0	
LCS 240-672948/4	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 673128

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233485-5	2022-12-F-20250917-01	Total/NA	Water	300.0	
240-233485-5	2022-12-F-20250917-01	Total/NA	Water	300.0	
240-233485-6	2022-13-F-20250917-01	Total/NA	Water	300.0	
240-233485-6	2022-13-F-20250917-01	Total/NA	Water	300.0	
240-233485-8	9631-F-20250917-01	Total/NA	Water	300.0	

General Chemistry (Continued)

Analysis Batch: 673128 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233485-8	9631-F-20250917-01	Total/NA	Water	300.0	
240-233485-9	DUP-003-F-20250917-01	Total/NA	Water	300.0	
240-233485-9	DUP-003-F-20250917-01	Total/NA	Water	300.0	
MB 240-673128/3	Method Blank	Total/NA	Water	300.0	
LCS 240-673128/4	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 673156

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233485-7	94136-F-20250917-01	Total/NA	Water	300.0	
240-233485-7	94136-F-20250917-01	Total/NA	Water	300.0	
240-233485-10	2016-05-F-20250917-01	Total/NA	Water	300.0	
MB 240-673156/3	Method Blank	Total/NA	Water	300.0	
LCS 240-673156/4	Lab Control Sample	Total/NA	Water	300.0	
240-233485-7 MS	94136-F-20250917-01	Total/NA	Water	300.0	
240-233485-7 MS	94136-F-20250917-01	Total/NA	Water	300.0	
240-233485-7 MSD	94136-F-20250917-01	Total/NA	Water	300.0	
240-233485-7 MSD	94136-F-20250917-01	Total/NA	Water	300.0	

Analysis Batch: 673436

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233485-1	2022-02-F-20250916-01	Total/NA	Water	2320 B-2021	
240-233485-2	2022-03-F-20250916-01	Total/NA	Water	2320 B-2021	
240-233485-3	9801-F-20250916-01	Total/NA	Water	2320 B-2021	
240-233485-4	9802-F-20250916-01	Total/NA	Water	2320 B-2021	
240-233485-5	2022-12-F-20250917-01	Total/NA	Water	2320 B-2021	
240-233485-6	2022-13-F-20250917-01	Total/NA	Water	2320 B-2021	
240-233485-7	94136-F-20250917-01	Total/NA	Water	2320 B-2021	
240-233485-8	9631-F-20250917-01	Total/NA	Water	2320 B-2021	
240-233485-9	DUP-003-F-20250917-01	Total/NA	Water	2320 B-2021	
240-233485-10	2016-05-F-20250917-01	Total/NA	Water	2320 B-2021	
MB 240-673436/30	Method Blank	Total/NA	Water	2320 B-2021	
MB 240-673436/4	Method Blank	Total/NA	Water	2320 B-2021	
LCS 240-673436/29	Lab Control Sample	Total/NA	Water	2320 B-2021	
LCS 240-673436/3	Lab Control Sample	Total/NA	Water	2320 B-2021	
240-233485-7 DU	94136-F-20250917-01	Total/NA	Water	2320 B-2021	

Rad

Prep Batch: 737502

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233485-1	2022-02-F-20250916-01	Total/NA	Water	PrecSep-21	
240-233485-2	2022-03-F-20250916-01	Total/NA	Water	PrecSep-21	
240-233485-3	9801-F-20250916-01	Total/NA	Water	PrecSep-21	
240-233485-4	9802-F-20250916-01	Total/NA	Water	PrecSep-21	
240-233485-5	2022-12-F-20250917-01	Total/NA	Water	PrecSep-21	
240-233485-6	2022-13-F-20250917-01	Total/NA	Water	PrecSep-21	
240-233485-7	94136-F-20250917-01	Total/NA	Water	PrecSep-21	
240-233485-8	9631-F-20250917-01	Total/NA	Water	PrecSep-21	
240-233485-9	DUP-003-F-20250917-01	Total/NA	Water	PrecSep-21	
240-233485-10	2016-05-F-20250917-01	Total/NA	Water	PrecSep-21	
MB 160-737502/1-A	Method Blank	Total/NA	Water	PrecSep-21	

Rad (Continued)

Prep Batch: 737502 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 160-737502/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
240-233485-7 MS	94136-F-20250917-01	Total/NA	Water	PrecSep-21	
240-233485-7 MSD	94136-F-20250917-01	Total/NA	Water	PrecSep-21	

Prep Batch: 737503

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233485-1	2022-02-F-20250916-01	Total/NA	Water	PrecSep_0	
240-233485-2	2022-03-F-20250916-01	Total/NA	Water	PrecSep_0	
240-233485-3	9801-F-20250916-01	Total/NA	Water	PrecSep_0	
240-233485-4	9802-F-20250916-01	Total/NA	Water	PrecSep_0	
240-233485-5	2022-12-F-20250917-01	Total/NA	Water	PrecSep_0	
240-233485-6	2022-13-F-20250917-01	Total/NA	Water	PrecSep_0	
240-233485-7	94136-F-20250917-01	Total/NA	Water	PrecSep_0	
240-233485-8	9631-F-20250917-01	Total/NA	Water	PrecSep_0	
240-233485-9	DUP-003-F-20250917-01	Total/NA	Water	PrecSep_0	
240-233485-10	2016-05-F-20250917-01	Total/NA	Water	PrecSep_0	
MB 160-737503/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-737503/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
240-233485-7 MS	94136-F-20250917-01	Total/NA	Water	PrecSep_0	
240-233485-7 MSD	94136-F-20250917-01	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-233485-1

Client Sample ID: 2022-02-F-20250916-01

Lab Sample ID: 240-233485-1

Date Collected: 09/16/25 10:44
Matrix: Water
Date Received: 09/20/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			672724	F3PF	EET CLE	09/22/25 14:00
Total Recoverable	Analysis	6010D		1	672913	AJC	EET CLE	09/24/25 00:03
Total Recoverable	Prep	3005A			672724	F3PF	EET CLE	09/22/25 14:00
Total Recoverable	Analysis	6020B		1	672975	S4FJ	EET CLE	09/23/25 17:25
Total Recoverable	Prep	3005A			672724	F3PF	EET CLE	09/22/25 14:00
Total Recoverable	Analysis	6020B		10	673142	S4FJ	EET CLE	09/24/25 10:40
Total/NA	Prep	7470A			672734	F3PF	EET CLE	09/22/25 14:00
Total/NA	Analysis	7470A		1	672955	TQ6W	EET CLE	09/23/25 12:36
Total/NA	Analysis	2320 B-2021		1	673436	VH6H	EET CLE	09/25/25 22:13
Total/NA	Analysis	2540 C-2020		1	672757	C5SV	EET CLE	09/22/25 14:58
Total/NA	Analysis	300.0		5	672948	JMR	EET CLE	09/24/25 13:30
Total/NA	Analysis	300.0		20	672948	JMR	EET CLE	09/24/25 13:56
Total/NA	Prep	PrecSep-21			737502	JTR	EET SL	09/24/25 15:19
Total/NA	Analysis	9315		1	741557	FLC	EET SL	10/21/25 21:17
Total/NA	Prep	PrecSep_0			737503	JTR	EET SL	09/24/25 15:25
Total/NA	Analysis	9320		1	741557	FLC	EET SL	10/21/25 09:58
Total/NA	Analysis	Ra226_Ra228		1	741768	EMH	EET SL	10/22/25 12:32

Client Sample ID: 2022-03-F-20250916-01

Lab Sample ID: 240-233485-2

Date Collected: 09/16/25 12:17
Matrix: Water
Date Received: 09/20/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			672724	F3PF	EET CLE	09/22/25 14:00
Total Recoverable	Analysis	6010D		1	672913	AJC	EET CLE	09/24/25 00:16
Total Recoverable	Prep	3005A			672724	F3PF	EET CLE	09/22/25 14:00
Total Recoverable	Analysis	6020B		1	672975	S4FJ	EET CLE	09/23/25 17:27
Total Recoverable	Prep	3005A			672724	F3PF	EET CLE	09/22/25 14:00
Total Recoverable	Analysis	6020B		10	673142	S4FJ	EET CLE	09/24/25 10:47
Total/NA	Prep	7470A			672734	F3PF	EET CLE	09/22/25 14:00
Total/NA	Analysis	7470A		1	672955	TQ6W	EET CLE	09/23/25 12:38
Total/NA	Analysis	2320 B-2021		1	673436	VH6H	EET CLE	09/25/25 22:24
Total/NA	Analysis	2540 C-2020		1	672757	C5SV	EET CLE	09/22/25 14:58
Total/NA	Analysis	300.0		100	672948	JMR	EET CLE	09/24/25 12:36
Total/NA	Prep	PrecSep-21			737502	JTR	EET SL	09/24/25 15:19
Total/NA	Analysis	9315		1	741557	FLC	EET SL	10/21/25 21:17
Total/NA	Prep	PrecSep_0			737503	JTR	EET SL	09/24/25 15:25
Total/NA	Analysis	9320		1	741557	FLC	EET SL	10/21/25 09:58
Total/NA	Analysis	Ra226_Ra228		1	741768	EMH	EET SL	10/22/25 12:32

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-233485-1
Project/Site: Federal CCR Wells

Client Sample ID: 9801-F-20250916-01
Lab Sample ID: 240-233485-3

Date Collected: 09/16/25 14:10
Matrix: Water
Date Received: 09/20/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			672724	F3PF	EET CLE	09/22/25 14:00
Total Recoverable	Analysis	6010D		1	672913	AJC	EET CLE	09/24/25 00:21
Total Recoverable	Prep	3005A			672724	F3PF	EET CLE	09/22/25 14:00
Total Recoverable	Analysis	6020B		1	672975	S4FJ	EET CLE	09/23/25 17:35
Total Recoverable	Prep	3005A			672724	F3PF	EET CLE	09/22/25 14:00
Total Recoverable	Analysis	6020B		10	673142	S4FJ	EET CLE	09/24/25 10:50
Total/NA	Prep	7470A			672734	F3PF	EET CLE	09/22/25 14:00
Total/NA	Analysis	7470A		1	672955	TQ6W	EET CLE	09/23/25 12:40
Total/NA	Analysis	2320 B-2021		1	673436	VH6H	EET CLE	09/25/25 22:32
Total/NA	Analysis	2540 C-2020		1	672757	C5SV	EET CLE	09/22/25 14:58
Total/NA	Analysis	300.0		10	672948	JMR	EET CLE	09/24/25 14:22
Total/NA	Analysis	300.0		50	672948	JMR	EET CLE	09/24/25 14:31
Total/NA	Prep	PrecSep-21			737502	JTR	EET SL	09/24/25 15:19
Total/NA	Analysis	9315		1	741550	FLC	EET SL	10/21/25 22:48
Total/NA	Prep	PrecSep_0			737503	JTR	EET SL	09/24/25 15:25
Total/NA	Analysis	9320		1	741557	FLC	EET SL	10/21/25 09:58
Total/NA	Analysis	Ra226_Ra228		1	741768	EMH	EET SL	10/22/25 12:32

Client Sample ID: 9802-F-20250916-01
Lab Sample ID: 240-233485-4

Date Collected: 09/16/25 14:54
Matrix: Water
Date Received: 09/20/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			672724	F3PF	EET CLE	09/22/25 14:00
Total Recoverable	Analysis	6010D		1	672913	AJC	EET CLE	09/24/25 00:25
Total Recoverable	Prep	3005A			672724	F3PF	EET CLE	09/22/25 14:00
Total Recoverable	Analysis	6020B		1	672975	S4FJ	EET CLE	09/23/25 17:38
Total Recoverable	Prep	3005A			672724	F3PF	EET CLE	09/22/25 14:00
Total Recoverable	Analysis	6020B		1	673142	S4FJ	EET CLE	09/24/25 10:53
Total/NA	Prep	7470A			672734	F3PF	EET CLE	09/22/25 14:00
Total/NA	Analysis	7470A		1	672955	TQ6W	EET CLE	09/23/25 12:41
Total/NA	Analysis	2320 B-2021		1	673436	VH6H	EET CLE	09/25/25 22:38
Total/NA	Analysis	2540 C-2020		1	672757	C5SV	EET CLE	09/22/25 14:58
Total/NA	Analysis	300.0		1	672948	JMR	EET CLE	09/24/25 12:54
Total/NA	Prep	PrecSep-21			737502	JTR	EET SL	09/24/25 15:19
Total/NA	Analysis	9315		1	741550	FLC	EET SL	10/21/25 22:49
Total/NA	Prep	PrecSep_0			737503	JTR	EET SL	09/24/25 15:25
Total/NA	Analysis	9320		1	741558	FLC	EET SL	10/21/25 09:57
Total/NA	Analysis	Ra226_Ra228		1	741768	EMH	EET SL	10/22/25 12:32

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-233485-1

Client Sample ID: 2022-12-F-20250917-01

Lab Sample ID: 240-233485-5

Date Collected: 09/17/25 09:30
Matrix: Water
Date Received: 09/20/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			672662	F3PF	EET CLE	09/22/25 14:00
Total Recoverable	Analysis	6010D		1	672913	AJC	EET CLE	09/23/25 18:42
Total Recoverable	Prep	3005A			672662	F3PF	EET CLE	09/22/25 14:00
Total Recoverable	Analysis	6020B		1	672980	RKT	EET CLE	09/23/25 14:48
Total/NA	Prep	7470A			672669	F3PF	EET CLE	09/22/25 12:00
Total/NA	Analysis	7470A		1	672955	TQ6W	EET CLE	09/23/25 10:57
Total/NA	Analysis	2320 B-2021		1	673436	VH6H	EET CLE	09/25/25 22:47
Total/NA	Analysis	2540 C-2020		1	672757	C5SV	EET CLE	09/22/25 14:58
Total/NA	Analysis	300.0		1	673128	JMR	EET CLE	09/24/25 22:42
Total/NA	Analysis	300.0		5	673128	JMR	EET CLE	09/24/25 22:51
Total/NA	Prep	PrecSep-21			737502	JTR	EET SL	09/24/25 15:19
Total/NA	Analysis	9315		1	741550	FLC	EET SL	10/21/25 22:49
Total/NA	Prep	PrecSep_0			737503	JTR	EET SL	09/24/25 15:25
Total/NA	Analysis	9320		1	741558	FLC	EET SL	10/21/25 09:57
Total/NA	Analysis	Ra226_Ra228		1	741768	EMH	EET SL	10/22/25 12:32

Client Sample ID: 2022-13-F-20250917-01

Lab Sample ID: 240-233485-6

Date Collected: 09/17/25 10:33
Matrix: Water
Date Received: 09/20/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			672662	F3PF	EET CLE	09/22/25 14:00
Total Recoverable	Analysis	6010D		1	672913	AJC	EET CLE	09/23/25 18:55
Total Recoverable	Prep	3005A			672662	F3PF	EET CLE	09/22/25 14:00
Total Recoverable	Analysis	6020B		1	672980	RKT	EET CLE	09/23/25 14:50
Total Recoverable	Prep	3005A			672662	F3PF	EET CLE	09/22/25 14:00
Total Recoverable	Analysis	6020B		10	672980	RKT	EET CLE	09/23/25 17:02
Total/NA	Prep	7470A			672669	F3PF	EET CLE	09/22/25 12:00
Total/NA	Analysis	7470A		1	672955	TQ6W	EET CLE	09/23/25 10:59
Total/NA	Analysis	2320 B-2021		1	673436	VH6H	EET CLE	09/25/25 23:22
Total/NA	Analysis	2540 C-2020		1	672757	C5SV	EET CLE	09/22/25 14:58
Total/NA	Analysis	300.0		5	673128	JMR	EET CLE	09/25/25 00:10
Total/NA	Analysis	300.0		25	673128	JMR	EET CLE	09/25/25 00:18
Total/NA	Prep	PrecSep-21			737502	JTR	EET SL	09/24/25 15:19
Total/NA	Analysis	9315		1	741550	FLC	EET SL	10/21/25 22:50
Total/NA	Prep	PrecSep_0			737503	JTR	EET SL	09/24/25 15:25
Total/NA	Analysis	9320		1	741558	FLC	EET SL	10/21/25 09:57
Total/NA	Analysis	Ra226_Ra228		1	741768	EMH	EET SL	10/22/25 12:32

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-233485-1

Client Sample ID: 94136-F-20250917-01

Lab Sample ID: 240-233485-7

Date Collected: 09/17/25 12:46
Matrix: Water
Date Received: 09/20/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			672662	F3PF	EET CLE	09/22/25 14:00
Total Recoverable	Analysis	6010D		1	672913	AJC	EET CLE	09/23/25 18:20
Total Recoverable	Prep	3005A			672662	F3PF	EET CLE	09/22/25 14:00
Total Recoverable	Analysis	6020B		1	672980	RKT	EET CLE	09/23/25 14:18
Total/NA	Prep	7470A			672669	F3PF	EET CLE	09/22/25 12:00
Total/NA	Analysis	7470A		1	672955	TQ6W	EET CLE	09/23/25 10:52
Total/NA	Analysis	2320 B-2021		1	673436	VH6H	EET CLE	09/25/25 23:06
Total/NA	Analysis	2540 C-2020		1	672757	C5SV	EET CLE	09/22/25 14:58
Total/NA	Analysis	300.0		2	673156	JMR	EET CLE	09/25/25 02:30
Total/NA	Analysis	300.0		10	673156	JMR	EET CLE	09/25/25 02:56
Total/NA	Prep	PrecSep-21			737502	JTR	EET SL	09/24/25 15:19
Total/NA	Analysis	9315		1	741550	FLC	EET SL	10/21/25 22:50
Total/NA	Prep	PrecSep_0			737503	JTR	EET SL	09/24/25 15:25
Total/NA	Analysis	9320		1	741558	FLC	EET SL	10/21/25 09:57
Total/NA	Analysis	Ra226_Ra228		1	741768	EMH	EET SL	10/22/25 12:32

Client Sample ID: 9631-F-20250917-01

Lab Sample ID: 240-233485-8

Date Collected: 09/17/25 14:39
Matrix: Water
Date Received: 09/20/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			672662	F3PF	EET CLE	09/22/25 14:00
Total Recoverable	Analysis	6010D		1	672913	AJC	EET CLE	09/23/25 19:00
Total Recoverable	Prep	3005A			672662	F3PF	EET CLE	09/22/25 14:00
Total Recoverable	Analysis	6020B		1	672980	RKT	EET CLE	09/23/25 14:53
Total Recoverable	Prep	3005A			672662	F3PF	EET CLE	09/22/25 14:00
Total Recoverable	Analysis	6020B		50	672980	RKT	EET CLE	09/23/25 17:04
Total/NA	Prep	7470A			672669	F3PF	EET CLE	09/22/25 12:00
Total/NA	Analysis	7470A		1	672955	TQ6W	EET CLE	09/23/25 11:01
Total/NA	Analysis	2320 B-2021		1	673436	VH6H	EET CLE	09/25/25 23:29
Total/NA	Analysis	2540 C-2020		1	672757	C5SV	EET CLE	09/22/25 14:58
Total/NA	Analysis	300.0		50	673128	JMR	EET CLE	09/25/25 00:27
Total/NA	Analysis	300.0		1000	673128	JMR	EET CLE	09/25/25 00:36
Total/NA	Prep	PrecSep-21			737502	JTR	EET SL	09/24/25 15:19
Total/NA	Analysis	9315		1	741550	FLC	EET SL	10/21/25 22:51
Total/NA	Prep	PrecSep_0			737503	JTR	EET SL	09/24/25 15:25
Total/NA	Analysis	9320		1	741558	FLC	EET SL	10/21/25 09:58
Total/NA	Analysis	Ra226_Ra228		1	741768	EMH	EET SL	10/22/25 12:32

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-233485-1

Client Sample ID: DUP-003-F-20250917-01

Lab Sample ID: 240-233485-9

Date Collected: 09/17/25 00:00
Matrix: Water
Date Received: 09/20/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			672662	F3PF	EET CLE	09/22/25 14:00
Total Recoverable	Analysis	6010D		1	672913	AJC	EET CLE	09/23/25 19:05
Total Recoverable	Prep	3005A			672662	F3PF	EET CLE	09/22/25 14:00
Total Recoverable	Analysis	6020B		1	672980	RKT	EET CLE	09/23/25 14:56
Total Recoverable	Prep	3005A			672662	F3PF	EET CLE	09/22/25 14:00
Total Recoverable	Analysis	6020B		50	672980	RKT	EET CLE	09/23/25 17:07
Total/NA	Prep	7470A			672669	F3PF	EET CLE	09/22/25 12:00
Total/NA	Analysis	7470A		1	672955	TQ6W	EET CLE	09/23/25 11:02
Total/NA	Analysis	2320 B-2021		1	673436	VH6H	EET CLE	09/25/25 23:37
Total/NA	Analysis	2540 C-2020		1	672757	C5SV	EET CLE	09/22/25 14:58
Total/NA	Analysis	300.0		50	673128	JMR	EET CLE	09/25/25 01:02
Total/NA	Analysis	300.0		1000	673128	JMR	EET CLE	09/25/25 01:11
Total/NA	Prep	PrecSep-21			737502	JTR	EET SL	09/24/25 15:19
Total/NA	Analysis	9315		1	741550	FLC	EET SL	10/21/25 22:51
Total/NA	Prep	PrecSep_0			737503	JTR	EET SL	09/24/25 15:25
Total/NA	Analysis	9320		1	741558	FLC	EET SL	10/21/25 09:58
Total/NA	Analysis	Ra226_Ra228		1	741768	EMH	EET SL	10/22/25 12:32

Client Sample ID: 2016-05-F-20250917-01

Lab Sample ID: 240-233485-10

Date Collected: 09/17/25 11:50
Matrix: Water
Date Received: 09/20/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			672662	F3PF	EET CLE	09/22/25 14:00
Total Recoverable	Analysis	6010D		1	672913	AJC	EET CLE	09/23/25 19:09
Total Recoverable	Prep	3005A			672662	F3PF	EET CLE	09/22/25 14:00
Total Recoverable	Analysis	6020B		1	672980	RKT	EET CLE	09/23/25 14:58
Total Recoverable	Prep	3005A			672662	F3PF	EET CLE	09/22/25 14:00
Total Recoverable	Analysis	6020B		1	672980	RKT	EET CLE	09/23/25 17:09
Total/NA	Prep	7470A			672669	F3PF	EET CLE	09/22/25 12:00
Total/NA	Analysis	7470A		1	672955	TQ6W	EET CLE	09/23/25 11:08
Total/NA	Analysis	2320 B-2021		1	673436	VH6H	EET CLE	09/25/25 23:42
Total/NA	Analysis	2540 C-2020		1	672757	C5SV	EET CLE	09/22/25 14:58
Total/NA	Analysis	300.0		1	673156	JMR	EET CLE	09/25/25 03:22
Total/NA	Prep	PrecSep-21			737502	JTR	EET SL	09/24/25 15:19
Total/NA	Analysis	9315		1	741550	FLC	EET SL	10/21/25 22:51
Total/NA	Prep	PrecSep_0			737503	JTR	EET SL	09/24/25 15:25
Total/NA	Analysis	9320		1	741558	FLC	EET SL	10/21/25 09:58
Total/NA	Analysis	Ra226_Ra228		1	741768	EMH	EET SL	10/22/25 12:32

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

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

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-233485-1
Project/Site: Federal CCR Wells

Laboratory: Eurofins Cleveland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0806	12-31-26
Georgia	State	4062	02-27-26
Illinois	NELAP	200004	08-31-26
Iowa	State	421	06-01-27
Kansas	NELAP	E-10336	01-31-26
Kentucky (UST)	State	112225	02-28-26
Kentucky (WW)	State	KY98016	12-31-25
Minnesota	NELAP	039-999-348	12-31-25
New Hampshire	NELAP	2250	09-30-25
New Jersey	NELAP	OH001	06-30-26
New York	NELAP	10975	04-01-26
North Dakota	State	R-244	02-27-26
Ohio	State	8303	11-04-25
Ohio VAP	State	ORELAP 4062	02-28-26
Oregon	NELAP	4062	02-27-26
Pennsylvania	NELAP	68-00340	08-31-26
Texas	NELAP	T104704517	08-31-26
US Fish & Wildlife	US Federal Programs	A26406	02-28-26
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	09-14-26
West Virginia DEP	State	210	12-31-25
Wisconsin	State	399167560	08-31-26

Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-27
ANAB	Dept. of Defense ELAP	L2305	04-06-27
ANAB	Dept. of Energy	L2305.01	04-06-27
ANAB	ISO/IEC 17025	L2305	04-06-27
Arizona	State	AZ0813	12-08-25
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	07-01-26
Connecticut	State	PH-0241	03-31-27
Florida	NELAP	E87689	06-30-26
HI - RadChem Recognition	State	n/a	06-30-26
Illinois	NELAP	200023	11-30-25
Iowa	State	373	12-01-26
Kansas	NELAP	E-10236	10-31-25
Kentucky (DW)	State	KY90125	12-31-25
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-25
Louisiana (All)	NELAP	106151	06-30-26
Louisiana (DW)	State	LA011	12-31-25
Maryland	State	310	10-01-26
Massachusetts	State	M-MO054	06-30-26
MI - RadChem Recognition	State	9005	06-30-26
Missouri	State	780	06-30-28
Nevada	State	MO00054	07-31-26

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-233485-1
Project/Site: Federal CCR Wells

Laboratory: Eurofins St. Louis (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New Jersey	NELAP	MO002	06-30-26
New Mexico	State	MO00054	06-30-26
New York	NELAP	11616	03-31-26
North Carolina (DW)	State	29700	06-30-26
North Dakota	State	R-207	06-30-25 *
Oklahoma	NELAP	9997	12-31-25
Oregon	NELAP	4157	09-01-26
Pennsylvania	NELAP	68-00540	02-28-26
South Carolina	State	85002	06-30-26
Texas	NELAP	T104704193	07-31-26
US Fish & Wildlife	US Federal Programs	058448	07-31-26
USDA	US Federal Programs	525-23-138-94730	05-18-26
Utah	NELAP	MO00054	07-31-26
Virginia	NELAP	460230	06-14-26
Washington	State	C592	08-31-26
West Virginia DEP	State	381	10-31-25

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

COLUMBUS 209

eurofins environment Testin...

Client Information	Sampler: Bobby Casto	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s):	COC No. 240-111832-39818.1
Client Contact: Taylor Huffman	Phone: 740-373-4308	E-Mail: roxanne.cisneros@et.eurofinsus.com	State of Origin:	Page: Page 1 of 8
Company: Lightstone Generation Gavin Power LLC	PWSID			Job #:
Address: 7397 OH-7	Due Date Requested:			
City: Cheshire	TAT Requested (days):			
State, Zip: OH, 45620	Compliance Project: Δ Yes Δ No			
Phone: 740-925-3171(Tel)	PO #: 2935505			
Email: taylor.huffman@lightstonegen.com	WO #			
Project Name: Gavin CCR	Project #: 24019633			
Site: Gavin	SSOW#:			

Analysis Requested

240-233485 COC

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B, 6020, 7470A	2540C_Calcd - TDS	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	300.0_28D - Chloride, Fluoride & Sulfate	2320B - (MOD) Alkalinity	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	N	D	N	N		
2022-02-F-20250916-01	9-16-25	1044	G	Water			1	1	2	1	1	6	
2022-03-F-20250916-01	9-16-25	1217	G	Water			1	1	2	1	1	6	
9801-F-20250916-01	9-16-25	1410	G	Water			1	1	2	1	1	6	
9802-F-20250916-01	9-16-25	1454	G	Water			1	1	2	1	1	6	
2022-12-F-20250917-01	9-17-25	0930	G	Water			1	1	2	1	1	6	
2022-13-F-20250917-01	9-17-25	1033	G	Water			1	1	2	1	1	6	
94136-F-20250917-01	9-17-25	1246	G	Water			1	1	2	1	1	6	
94136-F-20250917-MS-01	9-17-25	1246	G	Water		Y	1	1	2	1	1	6	
94136-F-20250917-MSD-01	9-17-25	1246	G	Water		Y	1	1	2	1	1	6	
9631-F-20250917-01	9-17-25	1439	G	Water			1	1	2	1	1	6	
DUP-003-F-20250917-01	9-17-25	—	G	Water			1	1	2	1	1	6	

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
	9-19-25/0930	KEMBLE	Ashley McCleskey	9-19-25 1330	EURO
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	9/19/25 1700	EURO	JORDAN N PYLES	9/20/25 0800	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 06/08/2021

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

COLUMBUS
209

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Client Information	Sampler: Bobby Casto	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s):	COC No. 240-111832-39818.1
Client Contact: Taylor Huffman	Phone: 740-373-4308	E-Mail: roxanne.cisneros@et.eurofinsus.com	State of Origin:	Page: Page 1 of 8
Company: Lightstone Generation Gavin Power LLC	PWSID	Analysis Requested		Job #:
Address: 7397 OH-7	Due Date Requested:			Preservation Codes: A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify), Other:
City: Cheshire	TAT Requested (days):			
State, Zip: OH, 45620	Compliance Project: Δ Yes Δ No			
Phone: 740-925-3171(Tel)	PO #: 2935505			
Email: taylor.huffman@lightstonegen.com	WO #			
Project Name: Gavin CCR	Project #: 24019633			
Site: Gavin	SSOW#			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B, 6020, 7470A	2540C_Calcd - TDS	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	300.0_28D - Chloride, Fluoride & Sulfate	2320B - (MOD) Alkalinity											Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	D	N	D	N	N											X	
2016-05-F-20250917-01	9-17-25	1150	G	Water			1	1	2	1	1											6	4 Partial Rq collected.
				Water																			
				Water																			
				Water																			
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				Water																			
				Water																			
				Water																			
				Water																			

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	[signature]	9-19-25 0930	KEMRON	Ashley McCrickerd	9-19-25 1325	EURO
2	[signature]	09/19/25 1700	EURO	JORDAN N PYLES	9/20/25 0800	EURO
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins – Cleveland Sample Receipt Form/Narrative Login # _____
Barberton Facility

Client Gavin Site Name _____ Cooler unpacked by JPyles

Cooler Received on 9/20/25 Opened on 9/20/25

FedEx: 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other

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

Eurofins Cooler # EC 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 # 13 (CF +.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_____	(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# HC567196
14 Were VOAs on the COC?	JP (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

Labeled by:

Labels Verified 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 # _____

Eurofins - Cleveland Sample Receipt Multiple Cooler Form

Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
(EC) Client Box Other	IR GUN #: 13	1.9	2.1	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #:	1.4	1.6	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #:	1.5	1.7	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #:	12.5	12.7	Wet Ice Blue Ice Dry Ice Water (None)
(EC) Client Box Other	IR GUN #: 13	0.9	1.1	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #:	1.3	1.5	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #:	0.4	0.6	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #:	1.2	1.4	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #:	2.3	2.5	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #:	0.7	0.9	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #:	1.2	1.4	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #:	0.8	1.0	(Wet Ice) Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None

☐ See Temperature Excursion Form

9/20/2025

Login Container Summary Report

240-233485

10/22/2025

Temperature readings _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
2022-02-F-20250916-01	240-233485-A-1	Plastic 60 mL - unpreserved				
2022-02-F-20250916-01	240 233485-B 1	Plastic 60 mL - unpreserved				
2022-02-F-20250916-01	240-233485-C-1	Plastic 500ml - unpreserved				
2022-02-F-20250916-01	240-233485-D-1	Plastic 500ml - with Nitric Acid	<2			
2022-02-F-20250916-01	240-233485-E-1	Plastic 1 liter - Nitric Acid	<2			
2022-02-F-20250916-01	240-233485-F-1	Plastic 1 liter - Nitric Acid	<2			
2022-03-F-20250916-01	240-233485-A-2	Plastic 60 mL - unpreserved				
2022-03 F-20250916-01	240-233485-B-2	Plastic 60 mL - unpreserved				
2022-03-F-20250916-01	240-233485-C-2	Plastic 500ml unpreserved				
2022-03-F 20250916-01	240-233485-D-2	Plastic 500ml - with Nitric Acid	<2			
2022-03-F-20250916-01	240-233485 E-2	Plastic 1 liter - Nitric Acid	<2			
2022-03 F-20250916-01	240-233485-F-2	Plastic 1 liter - Nitric Acid	<2			
9801-F-20250916-01	240-233485-A 3	Plastic 60 mL - unpreserved				
9801 F-20250916-01	240-233485-B-3	Plastic 60 mL - unpreserved				
9801-F-20250916-01	240-233485-C-3	Plastic 500ml - unpreserved				
9801 F-20250916-01	240-233485-D-3	Plastic 500ml - with Nitric Acid	<2			
9801-F-20250916-01	240-233485 E-3	Plastic 1 liter - Nitric Acid	<2			
9801-F-20250916-01	240-233485-F-3	Plastic 1 liter - Nitric Acid	<2			
9802-F-20250916-01	240-233485-A-4	Plastic 60 mL - unpreserved				
9802-F 20250916-01	240-233485-B-4	Plastic 60 mL unpreserved				
9802-F-20250916-01	240 233485-C-4	Plastic 500ml - unpreserved				
9802-F 20250916-01	240-233485-D-4	Plastic 500ml with Nitric Acid	<2			
9802-F-20250916-01	240 233485 E-4	Plastic 1 liter - Nitric Acid	<2			
9802-F-20250916-01	240-233485-F-4	Plastic 1 liter - Nitric Acid	<2			
2022-12-F-20250917-01	240-233485-A 5	Plastic 60 mL - unpreserved				
2022-12 F-20250917-01	240-233485-B-5	Plastic 60 mL - unpreserved				
2022-12-F-20250917-01	240-233485-C-5	Plastic 500ml - unpreserved				
2022-12-F-20250917-01	240 233485-D-5	Plastic 500ml with Nitric Acid	<2			
2022-12-F-20250917-01	240-233485-E-5	Plastic 1 liter - Nitric Acid	<2			
2022-12-F-20250917-01	240-233485-F-5	Plastic 1 liter - Nitric Acid	<2			
2022-13-F-20250917-01	240-233485-A-6	Plastic 60 mL - unpreserved				
2022-13-F-20250917-01	240-233485-B-6	Plastic 60 mL - unpreserved				
2022-13-F-20250917-01	240-233485-C-6	Plastic 500ml - unpreserved				
2022-13 F-20250917-01	240-233485-D-6	Plastic 500ml - with Nitric Acid	<2			
2022-13-F-20250917-01	240-233485-E-6	Plastic 1 liter Nitric Acid	<2			

10/22/2025

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
2022-13 F-20250917-01	240-233485-F-6	Plastic 1 liter Nitric Acid	<2			
94136-F-20250917-01	240-233485-A 7	Plastic 60 mL - unpreserved				
94136-F-20250917-01	240-233485-A-7 MS	Plastic 60 mL - unpreserved				
94136-F-20250917-01	240-233485-A-7 MSD	Plastic 60 mL - unpreserved				
94136-F-20250917-01	240-233485-B 7	Plastic 60 mL - unpreserved				
94136-F-20250917-01	240-233485-B-7 MS	Plastic 60 mL - unpreserved				
94136-F-20250917-01	240-233485-B-7 MSD	Plastic 60 mL - unpreserved				
94136 F 20250917-01	240-233485-C-7	Plastic 500ml - unpreserved				
94136-F-20250917-01	240-233485-C-7 MS	Plastic 500ml - unpreserved				
94136-F-20250917-01	240-233485-C-7 MSD	Plastic 500ml - unpreserved				
94136-F-20250917-01	240-233485 D-7	Plastic 500ml - with Nitric Acid	<2			
94136-F-20250917-01	240-233485-D-7 MS	Plastic 500ml - with Nitric Acid	<2			
94136-F-20250917-01	240-233485-D-7 MSD	Plastic 500ml - with Nitric Acid	<2			
94136-F-20250917-01	240 233485 E-7	Plastic 1 liter - Nitric Acid	<2			
94136-F-20250917-01	240-233485-E-7 MS	Plastic 1 liter - Nitric Acid	<2			
94136-F-20250917-01	240-233485-E-7 MSD	Plastic 1 liter - Nitric Acid	<2			
94136-F-20250917-01	240-233485 F 7	Plastic 1 liter - Nitric Acid	<2			
94136-F-20250917-01	240-233485-F-7 MS	Plastic 1 liter - Nitric Acid	<2			
94136-F-20250917-01	240-233485-F-7 MSD	Plastic 1 liter - Nitric Acid	<2			
9631-F-20250917-01	240-233485-A-8	Plastic 60 mL - unpreserved				
9631-F-20250917-01	240-233485-B-8	Plastic 60 mL - unpreserved				
9631-F 20250917-01	240-233485-C-8	Plastic 500ml - unpreserved				
9631-F-20250917-01	240 233485-D-8	Plastic 500ml - with Nitric Acid	<2			
9631-F 20250917-01	240-233485 E-8	Plastic 1 liter - Nitric Acid	<2			
9631-F-20250917-01	240-233485-F-8	Plastic 1 liter - Nitric Acid	<2			
DUP-003-F-20250917-01	240-233485-A-9	Plastic 60 mL - unpreserved				
DUP-003 F-20250917-01	240 233485-B-9	Plastic 60 mL - unpreserved				
DUP-003-F-20250917-01	240-233485-C-9	Plastic 500ml - unpreserved				
DUP-003 F-20250917-01	240 233485-D-9	Plastic 500ml - with Nitric Acid	<2			
DUP-003-F-20250917-01	240-233485 E-9	Plastic 1 liter - Nitric Acid	<2			
DUP-003-F-20250917-01	240-233485-F-9	Plastic 1 liter - Nitric Acid	<2			
2016-05-F-20250917-01	240-233485 A 10	Plastic 60 mL - unpreserved				
2016-05-F-20250917-01	240-233485 B 10	Plastic 60 mL - unpreserved				
2016-05 F 20250917-01	240 233485-C-10	Plastic 500ml - unpreserved				
2016-05-F-20250917-01	240-233485 D-10	Plastic 500ml - with Nitric Acid	<2			

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
2016-05-F-20250917-01	240 233485-E-10	Plastic 1 liter - Nitric Acid	<2			
2016-05-F-20250917-01	240-233485-F-10	Plastic 1 liter - Nitric Acid	<2			

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s): N/A	COC No: 240-208184.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: roxanne.cisneros@et.eurofinsus.com	State of Origin: Ohio	Page: Page 1 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): N/A		Job #: 240-233485-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 10/6/2025			Preservation Codes: -
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Federal GWM Wells	Project #: 24019633			
Site: N/A	SSOW#: N/A			Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9320_Ra228/PrecSep_0Radium-228 (GFPC)	9315_Ra226/PrecSep_21Radium-226 (GFPC)	Ra226Ra228_GFPCCombined Radium-226 and Radium-228	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
2022-02-F-20250916-01 (240-233485-1)	9/16/25	10:44 Eastern	G	Water			X	X	X	2	
2022-03-F-20250916-01 (240-233485-2)	9/16/25	12:17 Eastern	G	Water			X	X	X	2	
9801-F-20250916-01 (240-233485-3)	9/16/25	14:10 Eastern	G	Water			X	X	X	2	
9802-F-20250916-01 (240-233485-4)	9/16/25	14:54 Eastern	G	Water			X	X	X	2	
2022-12-F-20250917-01 (240-233485-5)	9/17/25	09:30 Eastern	G	Water			X	X	X	2	
2022-13-F-20250917-01 (240-233485-6)	9/17/25	10:33 Eastern	G	Water			X	X	X	2	
94136-F-20250917-01 (240-233485-7)	9/17/25	12:46 Eastern	G	Water			X	X	X	2	
94136-F-20250917-01 (240-233485-7MS)	9/17/25	12:46 Eastern	G	Water			X	X	X	2	
94136-F-20250917-01 (240-233485-7MSD)	9/17/25	12:46 Eastern	G	Water			X	X	X	2	

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

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

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	9/22/25 0800	EC	M. Pinette	SEP 23 2025 0830	
Relinquished by:	Date/Time:	Company	Received by: Meadow Pinette	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 10/10/2024

10/22/2025

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s): N/A	COC No: 240-208184.2
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: roxanne.cisneros@et.eurofinsus.com	State of Origin: Ohio	Page: Page 2 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): N/A		Job #: 240-233485-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 10/6/2025			
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Federal GWM Wells	Project #: 24019633			
Site: N/A	SSOW#: N/A			

Analysis Requested

Preservation Codes: -

Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9320_Ra228/PrecSep_0Radium-228 (GFPC)	9315_Ra226/PrecSep_21Radium-226 (GFPC)	Ra226Ra228_GFPCCombined Radium-226 and Radium-228	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
9631-F-20250917-01 (240-233485-8)	9/17/25	14:39 Eastern	G	Water			X	X	X	2	
DUP-003-F-20250917-01 (240-233485-9)	9/17/25	Eastern	G	Water			X	X	X	2	
2016-05-F-20250917-01 (240-233485-10)	9/17/25	11:50 Eastern	G	Water			X	X	X	2	

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

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

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	9/22/25 0800	EC	M. Pinette	SEP 23 20250830	
Relinquished by:	Date/Time:	Company	Received by: Meadow Pinette	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:

V ... 10/10/2024

10/22/2025

Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-233485-1

Login Number: 233485
List Number: 2
Creator: Pinette, Meadow L

List Source: Eurofins St. Louis
List Creation: 09/23/25 12:13 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?	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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620
Generated 10/24/2025 1:48:40 PM

JOB DESCRIPTION

Federal CCR Wells

JOB NUMBER

240-233653-1

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

myEOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization

Roxanne Cisneros

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Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(330)497-9396

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Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-233653-1

Qualifiers

Metals

Qualifier	Qualifier Description
^2	Calibration Blank (ICB and/or CCB) is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
F3	Duplicate RPD exceeds the control limit
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.
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 Narrative
240-233653-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The samples were received on 9/24/2025 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 0.8°C, 1.1°C and 1.4°C.

Metals
Method 6020B - Total Recoverable: The continuing calibration blank (CCB) for analytical batch 240-673467 contained sodium above the reporting limit (RL). All reported samples associated with this CCB contained this analyte at a concentration greater than 10X the value found in the CCB; therefore, re-analysis of samples was not performed.94139-F-20250919-01 (240-233653-2), DUP-004-F-20250919-01 (240-233653-3) and 2000-F-20250919-01 (240-233653-5)

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

General Chemistry
Method 300.0_28D: The following sample was diluted due to the nature of the sample matrix: 2019-09-F-20250922-01 (240-233653-6). Elevated reporting limits (RLs) are provided.

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

Gas Flow Proportional Counter
Method 9315_Ra226: Radium 226 Prep Batch 160-738134:

The barium carrier recovery is outside the upper control limit (110%) for the following samples: 2019-09-F-20250922-01 (240-233653-6) and 2019-07-F-20250922-01 (240-233653-7). There was physical evidence of matrix interference apparent during the initial preparation of the sample. Samples both had large pellets during out of in-growth process and needed extra 10N sodium hydroxide to dissolve. The QC samples associated with the batch have acceptable carrier recovery indicating the presence of matrix interference.

Method 9315_Ra226: Radium 226 Batch 738134

The Ba Carrier recovery is outside the upper control limit (110%) for the following samples: 2019-09-F-20250922-01 (240-233653-6) and 2019-07-F-20250922-01 (240-233653-7). There was physical evidence of matrix interference apparent during the initial preparation of the sample. The QC samples associated with the batch have acceptable carrier recovery indicating the presence of matrix interference. Samples have had native applied and have been truncated to minimize any potential bias a high carrier recovery may have on the results.

Method 9320_Ra228: Radium 228 Batch 738139

The Radium-228 laboratory control sample (LCS) associated with the following samples recovered at 127%: (LCS 160-738139/2-A). The limits in our LIMS system at 75-125% reflect the requirements of a regulatory agency that represents a large amount of our work. However the samples associated with this LCS are not from this agency and are therefore held to our in-house statistical limits of 68-154%. The LCS is within criteria and no further action is required.

Method 9320_Ra228: Radium 228 Batch 738139

Job ID: 240-233653-1 (Continued) Eurofins Cleveland

The detection goal was not met for the following sample due to a reduced sample volume used in prep attributed to the presence of matrix interferences. 94139-F-20250919-01 (240-233653-2)

Method 9320_Ra228: Radium 228 Prep Batch 160-738135:

The barium carrier recovery is outside the upper control limit (110%) for the following samples: 2019-09-F-20250922-01 (240-233653-6) and 2019-07-F-20250922-01 (240-233653-7). There was physical evidence of matrix interference apparent during the initial preparation of the sample. Samples both had large pellets during out of in-growth process and needed extra 10N sodium hydroxide to dissolve. The QC samples associated with the batch have acceptable carrier recovery indicating the presence of matrix interference.

Method 9320_Ra228: Radium-228 Prep Batch 160-738135:
The detection goal was not met for the following samples due to the reduction of sample size required by the presence of matrix interferences: DUP-004-F-20250919-01 (240-233653-3), 2019-09-F-20250922-01 (240-233653-6) and (240-233693-I-1-C). Analytical results are reported with the detection limit achieved.

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

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

Method Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-233653-1

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CLE
6020B	Metals (ICP/MS)	SW846	EET CLE
7470A	Mercury (CVAA)	SW846	EET CLE
2320 B-2021	Alkalinity	SM	EET CLE
2540 C-2020	Solids, Total Dissolved (TDS)	SM	EET CLE
300.0	Anions, Ion Chromatography	EPA	EET CLE
9315	Radium 226 by GFPC	SW846	EET SL
9320	Radium-228 (GFPC)	SW846	EET SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	EET SL
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CLE
7470A	Preparation, Mercury	SW846	EET CLE
PrecSep_0	Preparation, Precipitate Separation	None	EET SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	EET SL

Protocol References:

EPA = US Environmental Protection Agency

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:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

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

Sample Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-233653-1
Project/Site: Federal CCR Wells

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
240-233653-1	2022-14-F-20250919-01	Water	09/19/25 10:55	09/24/25 08:00	Ohio
240-233653-2	94139-F-20250919-01	Water	09/19/25 12:20	09/24/25 08:00	Ohio
240-233653-3	DUP-004-F-20250919-01	Water	09/19/25 00:00	09/24/25 08:00	Ohio
240-233653-4	93100-F-20250919-01	Water	09/19/25 13:25	09/24/25 08:00	Ohio
240-233653-5	2000-F-20250919-01	Water	09/19/25 14:50	09/24/25 08:00	Ohio
240-233653-6	2019-09-F-20250922-01	Water	09/22/25 12:51	09/24/25 08:00	Ohio
240-233653-7	2019-07-F-20250922-01	Water	09/22/25 14:17	09/24/25 08:00	Ohio
240-233653-8	EB-001-F-20250922-01	Water	09/22/25 15:15	09/24/25 08:00	Ohio

Detection Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-233653-1

Client Sample ID: 2022-14-F-20250919-01 — Lab Sample ID: 240-233653-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	410		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	1.2	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	4700		5.0	0.77	ug/L	1		6020B	Total Recoverable
Cadmium	0.31	J	1.0	0.077	ug/L	1		6020B	Total Recoverable
Calcium	310000		1000	250	ug/L	1		6020B	Total Recoverable
Chromium	2.8	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	1.4		1.0	0.086	ug/L	1		6020B	Total Recoverable
Lead	2.0		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	150		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	85000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	19	B	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	9100		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	5700000		10000	8800	ug/L	10		6020B	Total Recoverable
Thallium	0.61	J	1.0	0.51	ug/L	1		6020B	Total Recoverable
Total Alkalinity	150		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	150		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	13000		1000	780	mg/L	1		2540 C-2020	Total/NA
Chloride	11000		100	13	mg/L	100		300.0	Total/NA
Fluoride	0.53		0.50	0.24	mg/L	10		300.0	Total/NA
Sulfate	22		10	3.5	mg/L	10		300.0	Total/NA

Client Sample ID: 94139-F-20250919-01 — Lab Sample ID: 240-233653-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	560		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	4.4	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	93		5.0	0.77	ug/L	1		6020B	Total Recoverable
Beryllium	0.41	J	1.0	0.27	ug/L	1		6020B	Total Recoverable
Cadmium	0.13	J	1.0	0.077	ug/L	1		6020B	Total Recoverable
Calcium	7600		1000	250	ug/L	1		6020B	Total Recoverable
Chromium	5.4		5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	3.0		1.0	0.086	ug/L	1		6020B	Total Recoverable
Lead	0.86	J	1.0	0.45	ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: 94139-F-20250919-01 (Continued)

Lab Sample ID: 240-233653-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lithium	19		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	2500		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	190	B	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	1600		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	550000	^2	1000	880	ug/L	1		6020B	Total Recoverable
Thallium	0.51	J	1.0	0.51	ug/L	1		6020B	Total Recoverable
Total Alkalinity	490		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	450		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Carbonate Alkalinity as CaCO3	33		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	1300		20	16	mg/L	1		2540 C-2020	Total/NA
Chloride	500		10	1.3	mg/L	10		300.0	Total/NA
Fluoride	4.3		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	59		1.0	0.35	mg/L	1		300.0	Total/NA

Client Sample ID: DUP-004-F-20250919-01

Lab Sample ID: 240-233653-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	570		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	3.9	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	91		5.0	0.77	ug/L	1		6020B	Total Recoverable
Calcium	7600		1000	250	ug/L	1		6020B	Total Recoverable
Chromium	4.6	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	2.6		1.0	0.086	ug/L	1		6020B	Total Recoverable
Lead	0.75	J	1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	19		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	2400		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	190	B	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	1500		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	540000	^2	1000	880	ug/L	1		6020B	Total Recoverable
Total Alkalinity	490		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	460		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Carbonate Alkalinity as CaCO3	31		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	1300		20	16	mg/L	1		2540 C-2020	Total/NA
Chloride	510		10	1.3	mg/L	10		300.0	Total/NA
Fluoride	4.3		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	59		1.0	0.35	mg/L	1		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-233653-1

Client Sample ID: 93100-F-20250919-01 — Lab Sample ID: 240-233653-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	520		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	1.8	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	510		5.0	0.77	ug/L	1		6020B	Total Recoverable
Calcium	17000		1000	250	ug/L	1		6020B	Total Recoverable
Chromium	6.5		5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	7.2		1.0	0.086	ug/L	1		6020B	Total Recoverable
Lithium	42		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	5100		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	120	B	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	2400		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	1400000		10000	8800	ug/L	10		6020B	Total Recoverable
Total Alkalinity	330		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	330		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	3300		50	39	mg/L	1		2540 C-2020	Total/NA
Chloride	2000		20	2.6	mg/L	20		300.0	Total/NA
Fluoride	2.7		0.25	0.12	mg/L	5		300.0	Total/NA
Sulfate	16		5.0	1.7	mg/L	5		300.0	Total/NA

Client Sample ID: 2000-F-20250919-01 — Lab Sample ID: 240-233653-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	370		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	2.5	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	33		5.0	0.77	ug/L	1		6020B	Total Recoverable
Calcium	2900		1000	250	ug/L	1		6020B	Total Recoverable
Chromium	7.2		5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	0.35	J	1.0	0.086	ug/L	1		6020B	Total Recoverable
Lithium	16		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	840	J	1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	35	B	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	990	J	1000	220	ug/L	1		6020B	Total Recoverable
Sodium	480000	^2	1000	880	ug/L	1		6020B	Total Recoverable
Total Alkalinity	390		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	360		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Carbonate Alkalinity as CaCO3	34		5.0	2.6	mg/L	1		2320 B-2021	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Cleveland

Detection Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-233653-1

Client Sample ID: 2000-F-20250919-01 (Continued) — Lab Sample ID: 240-233653-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	1300		20	16	mg/L	1		2540 C-2020	Total/NA
Chloride	130		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	2.5		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	490		10	3.5	mg/L	10		300.0	Total/NA

Client Sample ID: 2019-09-F-20250922-01 — Lab Sample ID: 240-233653-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	460		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	2.6	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	33000		50	7.7	ug/L	10		6020B	Total Recoverable
Calcium	970000		1000	250	ug/L	1		6020B	Total Recoverable
Chromium	31		5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	2.4		1.0	0.086	ug/L	1		6020B	Total Recoverable
Lead	0.55	J	1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	290		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	300000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	17	B	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	24000		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	10000000		50000	44000	ug/L	50		6020B	Total Recoverable
Total Alkalinity	170		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	170		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	27000		1000	780	mg/L	1		2540 C-2020	Total/NA
Chloride	20000		1000	130	mg/L	1000		300.0	Total/NA

Client Sample ID: 2019-07-F-20250922-01 — Lab Sample ID: 240-233653-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	550		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	0.85	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	650		5.0	0.77	ug/L	1		6020B	Total Recoverable
Calcium	970000		1000	250	ug/L	1		6020B	Total Recoverable
Chromium	33		5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	10		1.0	0.086	ug/L	1		6020B	Total Recoverable
Lithium	300		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	270000		1000	61	ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: 2019-07-F-20250922-01 (Continued)
Lab Sample ID: 240-233653-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Molybdenum	7.4	B	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	20000		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	9600000		10000	8800	ug/L	10		6020B	Total Recoverable
Total Alkalinity	210		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	210		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	32000		1000	780	mg/L	1		2540 C-2020	Total/NA
Chloride	20000		1000	130	mg/L	1000		300.0	Total/NA
Sulfate	270		50	17	mg/L	50		300.0	Total/NA

Client Sample ID: EB-001-F-20250922-01
Lab Sample ID: 240-233653-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1700		100	57	ug/L	1		6010D	Total Recoverable
Barium	2.0	J	5.0	0.77	ug/L	1		6020B	Total Recoverable
Calcium	400	J	1000	250	ug/L	1		6020B	Total Recoverable
Magnesium	110	J	1000	61	ug/L	1		6020B	Total Recoverable
Total Alkalinity	4.7	J	5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	4.7	J	5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	33		10	7.8	mg/L	1		2540 C-2020	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 2022-14-F-20250919-01
Date Collected: 09/19/25 10:55
Date Received: 09/24/25 08:00

Lab Sample ID: 240-233653-1
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**410**		100	57	ug/L		09/25/25 14:00	09/27/25 04:20	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		09/25/25 14:00	09/26/25 20:24	1
Arsenic	**1.2**	**J**	5.0	0.75	ug/L		09/25/25 14:00	09/26/25 20:24	1
Barium	**4700**		5.0	0.77	ug/L		09/25/25 14:00	09/26/25 20:24	1
Beryllium	ND		1.0	0.27	ug/L		09/25/25 14:00	09/26/25 20:24	1
Cadmium	**0.31**	**J**	1.0	0.077	ug/L		09/25/25 14:00	09/26/25 20:24	1
Calcium	**310000**		1000	250	ug/L		09/25/25 14:00	09/26/25 20:24	1
Chromium	**2.8**	**J**	5.0	1.2	ug/L		09/25/25 14:00	09/26/25 20:24	1
Cobalt	**1.4**		1.0	0.086	ug/L		09/25/25 14:00	09/26/25 20:24	1
Lead	**2.0**		1.0	0.45	ug/L		09/25/25 14:00	09/26/25 20:24	1
Lithium	**150**		8.0	3.4	ug/L		09/25/25 14:00	09/26/25 20:24	1
Magnesium	**85000**		1000	61	ug/L		09/25/25 14:00	09/26/25 20:24	1
Molybdenum	**19**	**B**	5.0	1.1	ug/L		09/25/25 14:00	09/26/25 20:24	1
Potassium	**9100**		1000	220	ug/L		09/25/25 14:00	09/26/25 20:24	1
Selenium	ND		5.0	0.89	ug/L		09/25/25 14:00	09/26/25 20:24	1
Sodium	**5700000**		10000	8800	ug/L		09/25/25 14:00	09/29/25 09:54	10
Thallium	**0.61**	**J**	1.0	0.51	ug/L		09/25/25 14:00	09/26/25 20:24	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		09/25/25 14:00	09/26/25 14:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	**150**		5.0	2.6	mg/L			09/26/25 22:35	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**150**		5.0	2.6	mg/L			09/26/25 22:35	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			09/26/25 22:35	1
Total Dissolved Solids (SM 2540 C-2020)	**13000**		1000	780	mg/L			09/25/25 09:40	1
Chloride (EPA 300.0)	**11000**		100	13	mg/L			09/25/25 05:16	100
Fluoride (EPA 300.0)	**0.53**		0.50	0.24	mg/L			09/25/25 05:08	10
Sulfate (EPA 300.0)	**22**		10	3.5	mg/L			09/25/25 05:08	10

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**3.07**		0.376	0.467	1.00	0.200	pCi/L	09/29/25 08:21	10/21/25 08:04	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*95.3*		*30 - 110*	*09/29/25 08:21*	*10/21/25 08:04*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**3.97**		0.649	0.745	1.00	0.492	pCi/L	09/29/25 08:27	10/17/25 12:03	1

Client Sample ID: 2022-14-F-20250919-01
Date Collected: 09/19/25 10:55
Date Received: 09/24/25 08:00

Lab Sample ID: 240-233653-1
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*95.3*		*30 - 110*	*09/29/25 08:27*	*10/17/25 12:03*	*1*
Y Carrier	*79.3*		*30 - 110*	*09/29/25 08:27*	*10/17/25 12:03*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**7.05**		0.750	0.879	5.00	0.492	pCi/L		10/21/25 12:22	1

Client Sample ID: 94139-F-20250919-01
Date Collected: 09/19/25 12:20
Date Received: 09/24/25 08:00

Lab Sample ID: 240-233653-2
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	560		100	57	ug/L		09/25/25 14:00	09/27/25 04:52	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		09/25/25 14:00	09/26/25 20:37	1
Arsenic	4.4	J	5.0	0.75	ug/L		09/25/25 14:00	09/26/25 20:37	1
Barium	93		5.0	0.77	ug/L		09/25/25 14:00	09/26/25 20:37	1
Beryllium	0.41	J	1.0	0.27	ug/L		09/25/25 14:00	09/26/25 20:37	1
Cadmium	0.13	J	1.0	0.077	ug/L		09/25/25 14:00	09/26/25 20:37	1
Calcium	7600		1000	250	ug/L		09/25/25 14:00	09/26/25 20:37	1
Chromium	5.4		5.0	1.2	ug/L		09/25/25 14:00	09/26/25 20:37	1
Cobalt	3.0		1.0	0.086	ug/L		09/25/25 14:00	09/26/25 20:37	1
Lead	0.86	J	1.0	0.45	ug/L		09/25/25 14:00	09/26/25 20:37	1
Lithium	19		8.0	3.4	ug/L		09/25/25 14:00	09/26/25 20:37	1
Magnesium	2500		1000	61	ug/L		09/25/25 14:00	09/26/25 20:37	1
Molybdenum	190	B	5.0	1.1	ug/L		09/25/25 14:00	09/26/25 20:37	1
Potassium	1600		1000	220	ug/L		09/25/25 14:00	09/26/25 20:37	1
Selenium	ND		5.0	0.89	ug/L		09/25/25 14:00	09/26/25 20:37	1
Sodium	550000	^2	1000	880	ug/L		09/25/25 14:00	09/26/25 20:37	1
Thallium	0.51	J	1.0	0.51	ug/L		09/25/25 14:00	09/26/25 20:37	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		09/25/25 14:00	09/26/25 14:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	490		5.0	2.6	mg/L			09/26/25 22:42	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	450		5.0	2.6	mg/L			09/26/25 22:42	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	33		5.0	2.6	mg/L			09/26/25 22:42	1
Total Dissolved Solids (SM 2540 C-2020)	1300		20	16	mg/L			09/25/25 09:40	1
Chloride (EPA 300.0)	500		10	1.3	mg/L			09/25/25 04:07	10
Fluoride (EPA 300.0)	4.3		0.050	0.024	mg/L			09/25/25 03:58	1
Sulfate (EPA 300.0)	59		1.0	0.35	mg/L			09/25/25 03:58	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.520		0.227	0.231	1.00	0.259	pCi/L	09/29/25 08:21	10/21/25 08:04	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*66.7*		*30 - 110*	*09/29/25 08:21*	*10/21/25 08:04*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.155	U G	0.642	0.643	1.00	1.15	pCi/L	09/29/25 08:27	10/17/25 12:03	1

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-233653-1

Client Sample ID: 94139-F-20250919-01
Date Collected: 09/19/25 12:20
Date Received: 09/24/25 08:00

Lab Sample ID: 240-233653-2
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*66.7*		*30 - 110*	*09/29/25 08:27*	*10/17/25 12:03*	*1*
Y Carrier	*79.3*		*30 - 110*	*09/29/25 08:27*	*10/17/25 12:03*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.674	U	0.681	0.683	5.00	1.15	pCi/L		10/21/25 12:22	1

Client Sample ID: DUP-004-F-20250919-01
Date Collected: 09/19/25 00:00
Date Received: 09/24/25 08:00

Lab Sample ID: 240-233653-3
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	570		100	57	ug/L		09/25/25 14:00	09/27/25 04:56	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		09/25/25 14:00	09/26/25 20:40	1
Arsenic	3.9	J	5.0	0.75	ug/L		09/25/25 14:00	09/26/25 20:40	1
Barium	91		5.0	0.77	ug/L		09/25/25 14:00	09/26/25 20:40	1
Beryllium	ND		1.0	0.27	ug/L		09/25/25 14:00	09/26/25 20:40	1
Cadmium	ND		1.0	0.077	ug/L		09/25/25 14:00	09/26/25 20:40	1
Calcium	7600		1000	250	ug/L		09/25/25 14:00	09/26/25 20:40	1
Chromium	4.6	J	5.0	1.2	ug/L		09/25/25 14:00	09/26/25 20:40	1
Cobalt	2.6		1.0	0.086	ug/L		09/25/25 14:00	09/26/25 20:40	1
Lead	0.75	J	1.0	0.45	ug/L		09/25/25 14:00	09/26/25 20:40	1
Lithium	19		8.0	3.4	ug/L		09/25/25 14:00	09/26/25 20:40	1
Magnesium	2400		1000	61	ug/L		09/25/25 14:00	09/26/25 20:40	1
Molybdenum	190	B	5.0	1.1	ug/L		09/25/25 14:00	09/26/25 20:40	1
Potassium	1500		1000	220	ug/L		09/25/25 14:00	09/26/25 20:40	1
Selenium	ND		5.0	0.89	ug/L		09/25/25 14:00	09/26/25 20:40	1
Sodium	540000	^2	1000	880	ug/L		09/25/25 14:00	09/26/25 20:40	1
Thallium	ND		1.0	0.51	ug/L		09/25/25 14:00	09/26/25 20:40	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		09/25/25 14:00	09/26/25 14:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	490		5.0	2.6	mg/L			09/26/25 22:50	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	460		5.0	2.6	mg/L			09/26/25 22:50	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	31		5.0	2.6	mg/L			09/26/25 22:50	1
Total Dissolved Solids (SM 2540 C-2020)	1300		20	16	mg/L			09/25/25 09:40	1
Chloride (EPA 300.0)	510		10	1.3	mg/L			09/25/25 04:24	10
Fluoride (EPA 300.0)	4.3		0.050	0.024	mg/L			09/25/25 04:15	1
Sulfate (EPA 300.0)	59		1.0	0.35	mg/L			09/25/25 04:15	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.503		0.331	0.334	1.00	0.446	pCi/L	09/29/25 08:04	10/23/25 17:17	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.1*		*30 - 110*	*09/29/25 08:04*	*10/23/25 17:17*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.652	U G	0.912	0.914	1.00	1.53	pCi/L	09/29/25 08:10	10/23/25 14:26	1

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-233653-1

Client Sample ID: DUP-004-F-20250919-01

Date Collected: 09/19/25 00:00
Date Received: 09/24/25 08:00

Lab Sample ID: 240-233653-3

Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.1*		*30 - 110*	*09/29/25 08:10*	*10/23/25 14:26*	*1*
Y Carrier	*80.7*		*30 - 110*	*09/29/25 08:10*	*10/23/25 14:26*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.15	U	0.970	0.973	5.00	1.53	pCi/L		10/23/25 09:16	1

Client Sample ID: 93100-F-20250919-01
Date Collected: 09/19/25 13:25
Date Received: 09/24/25 08:00

Lab Sample ID: 240-233653-4
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	520		100	57	ug/L		09/25/25 14:00	09/27/25 05:01	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		09/25/25 14:00	09/26/25 20:48	1
Arsenic	1.8	J	5.0	0.75	ug/L		09/25/25 14:00	09/26/25 20:48	1
Barium	510		5.0	0.77	ug/L		09/25/25 14:00	09/26/25 20:48	1
Beryllium	ND		1.0	0.27	ug/L		09/25/25 14:00	09/26/25 20:48	1
Cadmium	ND		1.0	0.077	ug/L		09/25/25 14:00	09/26/25 20:48	1
Calcium	17000		1000	250	ug/L		09/25/25 14:00	09/26/25 20:48	1
Chromium	6.5		5.0	1.2	ug/L		09/25/25 14:00	09/26/25 20:48	1
Cobalt	7.2		1.0	0.086	ug/L		09/25/25 14:00	09/26/25 20:48	1
Lead	ND		1.0	0.45	ug/L		09/25/25 14:00	09/26/25 20:48	1
Lithium	42		8.0	3.4	ug/L		09/25/25 14:00	09/26/25 20:48	1
Magnesium	5100		1000	61	ug/L		09/25/25 14:00	09/26/25 20:48	1
Molybdenum	120	B	5.0	1.1	ug/L		09/25/25 14:00	09/26/25 20:48	1
Potassium	2400		1000	220	ug/L		09/25/25 14:00	09/26/25 20:48	1
Selenium	ND		5.0	0.89	ug/L		09/25/25 14:00	09/26/25 20:48	1
Sodium	1400000		10000	8800	ug/L		09/25/25 14:00	09/29/25 10:05	10
Thallium	ND		1.0	0.51	ug/L		09/25/25 14:00	09/26/25 20:48	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		09/25/25 14:00	09/26/25 14:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	330		5.0	2.6	mg/L			09/26/25 22:59	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	330		5.0	2.6	mg/L			09/26/25 22:59	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			09/26/25 22:59	1
Total Dissolved Solids (SM 2540 C-2020)	3300		50	39	mg/L			09/25/25 09:40	1
Chloride (EPA 300.0)	2000		20	2.6	mg/L			09/25/25 04:59	20
Fluoride (EPA 300.0)	2.7		0.25	0.12	mg/L			09/25/25 04:50	5
Sulfate (EPA 300.0)	16		5.0	1.7	mg/L			09/25/25 04:50	5

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.522		0.250	0.255	1.00	0.280	pCi/L	09/29/25 08:04	10/23/25 17:17	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.8*		*30 - 110*	*09/29/25 08:04*	*10/23/25 17:17*	*1*

Method: SW846 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	0.539	0.540	1.00	0.929	pCi/L	09/29/25 08:10	10/23/25 14:27	1

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-233653-1

Client Sample ID: 93100-F-20250919-01
Date Collected: 09/19/25 13:25
Date Received: 09/24/25 08:00

Lab Sample ID: 240-233653-4
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.8*		*30 - 110*	*09/29/25 08:10*	*10/23/25 14:27*	*1*
Y Carrier	*79.3*		*30 - 110*	*09/29/25 08:10*	*10/23/25 14:27*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.813	U	0.594	0.597	5.00	0.929	pCi/L		10/23/25 09:16	1

Client Sample ID: 2000-F-20250919-01
Date Collected: 09/19/25 14:50
Date Received: 09/24/25 08:00

Lab Sample ID: 240-233653-5
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	370		100	57	ug/L		09/25/25 14:00	09/27/25 05:05	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		09/25/25 14:00	09/26/25 20:50	1
Arsenic	2.5	J	5.0	0.75	ug/L		09/25/25 14:00	09/26/25 20:50	1
Barium	33		5.0	0.77	ug/L		09/25/25 14:00	09/26/25 20:50	1
Beryllium	ND		1.0	0.27	ug/L		09/25/25 14:00	09/26/25 20:50	1
Cadmium	ND		1.0	0.077	ug/L		09/25/25 14:00	09/26/25 20:50	1
Calcium	2900		1000	250	ug/L		09/25/25 14:00	09/26/25 20:50	1
Chromium	7.2		5.0	1.2	ug/L		09/25/25 14:00	09/26/25 20:50	1
Cobalt	0.35	J	1.0	0.086	ug/L		09/25/25 14:00	09/26/25 20:50	1
Lead	ND		1.0	0.45	ug/L		09/25/25 14:00	09/26/25 20:50	1
Lithium	16		8.0	3.4	ug/L		09/25/25 14:00	09/26/25 20:50	1
Magnesium	840	J	1000	61	ug/L		09/25/25 14:00	09/26/25 20:50	1
Molybdenum	35	B	5.0	1.1	ug/L		09/25/25 14:00	09/26/25 20:50	1
Potassium	990	J	1000	220	ug/L		09/25/25 14:00	09/26/25 20:50	1
Selenium	ND		5.0	0.89	ug/L		09/25/25 14:00	09/26/25 20:50	1
Sodium	480000	^2	1000	880	ug/L		09/25/25 14:00	09/26/25 20:50	1
Thallium	ND		1.0	0.51	ug/L		09/25/25 14:00	09/26/25 20:50	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		09/25/25 14:00	09/26/25 14:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	390		5.0	2.6	mg/L			09/26/25 23:07	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	360		5.0	2.6	mg/L			09/26/25 23:07	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	34		5.0	2.6	mg/L			09/26/25 23:07	1
Total Dissolved Solids (SM 2540 C-2020)	1300		20	16	mg/L			09/25/25 09:40	1
Chloride (EPA 300.0)	130		1.0	0.13	mg/L			09/25/25 04:32	1
Fluoride (EPA 300.0)	2.5		0.050	0.024	mg/L			09/25/25 04:32	1
Sulfate (EPA 300.0)	490		10	3.5	mg/L			09/25/25 04:42	10

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.298	U	0.219	0.221	1.00	0.311	pCi/L	09/29/25 08:04	10/23/25 17:26	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.8*		*30 - 110*	*09/29/25 08:04*	*10/23/25 17:26*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.590	U	0.579	0.581	1.00	0.929	pCi/L	09/29/25 08:10	10/23/25 14:27	1

Client Sample ID: 2000-F-20250919-01
Date Collected: 09/19/25 14:50
Date Received: 09/24/25 08:00

Lab Sample ID: 240-233653-5
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.8*		*30 - 110*	*09/29/25 08:10*	*10/23/25 14:27*	*1*
Y Carrier	*78.1*		*30 - 110*	*09/29/25 08:10*	*10/23/25 14:27*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.887	U	0.619	0.622	5.00	0.929	pCi/L		10/23/25 09:16	1

Client Sample ID: 2019-09-F-20250922-01
Date Collected: 09/22/25 12:51
Date Received: 09/24/25 08:00

Lab Sample ID: 240-233653-6
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	460		100	57	ug/L		09/25/25 14:00	09/27/25 05:10	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		09/25/25 14:00	09/26/25 20:53	1
Arsenic	2.6	J	5.0	0.75	ug/L		09/25/25 14:00	09/26/25 20:53	1
Barium	33000		50	7.7	ug/L		09/25/25 14:00	09/29/25 10:08	10
Beryllium	ND		1.0	0.27	ug/L		09/25/25 14:00	09/26/25 20:53	1
Cadmium	ND		1.0	0.077	ug/L		09/25/25 14:00	09/26/25 20:53	1
Calcium	970000		1000	250	ug/L		09/25/25 14:00	09/26/25 20:53	1
Chromium	31		5.0	1.2	ug/L		09/25/25 14:00	09/26/25 20:53	1
Cobalt	2.4		1.0	0.086	ug/L		09/25/25 14:00	09/26/25 20:53	1
Lead	0.55	J	1.0	0.45	ug/L		09/25/25 14:00	09/26/25 20:53	1
Lithium	290		8.0	3.4	ug/L		09/25/25 14:00	09/26/25 20:53	1
Magnesium	300000		1000	61	ug/L		09/25/25 14:00	09/26/25 20:53	1
Molybdenum	17	B	5.0	1.1	ug/L		09/25/25 14:00	09/26/25 20:53	1
Potassium	24000		1000	220	ug/L		09/25/25 14:00	09/26/25 20:53	1
Selenium	ND		5.0	0.89	ug/L		09/25/25 14:00	09/26/25 20:53	1
Sodium	10000000		50000	44000	ug/L		09/25/25 14:00	09/29/25 10:16	50
Thallium	ND		1.0	0.51	ug/L		09/25/25 14:00	09/26/25 20:53	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		09/25/25 14:00	09/26/25 14:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	170		5.0	2.6	mg/L			09/26/25 23:25	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	170		5.0	2.6	mg/L			09/26/25 23:25	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			09/26/25 23:25	1
Total Dissolved Solids (SM 2540 C-2020)	27000		1000	780	mg/L			09/26/25 09:44	1
Chloride (EPA 300.0)	20000		1000	130	mg/L			09/25/25 05:51	1000
Fluoride (EPA 300.0)	ND		2.5	1.2	mg/L			09/25/25 05:43	50
Sulfate (EPA 300.0)	ND		50	17	mg/L			09/25/25 05:43	50

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	36.2		2.25	3.96	1.00	0.559	pCi/L	09/29/25 08:04	10/23/25 17:26	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*157*	*X*	*30 - 110*	*09/29/25 08:04*	*10/23/25 17:26*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	92.3	G	4.20	9.48	1.00	1.19	pCi/L	09/29/25 08:10	10/23/25 14:27	1

Client Sample ID: 2019-09-F-20250922-01
Date Collected: 09/22/25 12:51
Date Received: 09/24/25 08:00

Lab Sample ID: 240-233653-6
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*157*	*X*	*30 - 110*	*09/29/25 08:10*	*10/23/25 14:27*	*1*
Y Carrier	*76.6*		*30 - 110*	*09/29/25 08:10*	*10/23/25 14:27*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**129**		4.76	10.3	5.00	1.19	pCi/L		10/23/25 09:16	1

Client Sample ID: 2019-07-F-20250922-01
Date Collected: 09/22/25 14:17
Date Received: 09/24/25 08:00

Lab Sample ID: 240-233653-7
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**550**		100	57	ug/L		09/25/25 14:00	09/27/25 05:15	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		09/25/25 14:00	09/26/25 20:56	1
Arsenic	**0.85**	**J**	5.0	0.75	ug/L		09/25/25 14:00	09/26/25 20:56	1
Barium	**650**		5.0	0.77	ug/L		09/25/25 14:00	09/26/25 20:56	1
Beryllium	ND		1.0	0.27	ug/L		09/25/25 14:00	09/26/25 20:56	1
Cadmium	ND		1.0	0.077	ug/L		09/25/25 14:00	09/26/25 20:56	1
Calcium	**970000**		1000	250	ug/L		09/25/25 14:00	09/26/25 20:56	1
Chromium	**33**		5.0	1.2	ug/L		09/25/25 14:00	09/26/25 20:56	1
Cobalt	**10**		1.0	0.086	ug/L		09/25/25 14:00	09/26/25 20:56	1
Lead	ND		1.0	0.45	ug/L		09/25/25 14:00	09/26/25 20:56	1
Lithium	**300**		8.0	3.4	ug/L		09/25/25 14:00	09/26/25 20:56	1
Magnesium	**270000**		1000	61	ug/L		09/25/25 14:00	09/26/25 20:56	1
Molybdenum	**7.4**	**B**	5.0	1.1	ug/L		09/25/25 14:00	09/26/25 20:56	1
Potassium	**20000**		1000	220	ug/L		09/25/25 14:00	09/26/25 20:56	1
Selenium	ND		5.0	0.89	ug/L		09/25/25 14:00	09/26/25 20:56	1
Sodium	**9600000**		10000	8800	ug/L		09/25/25 14:00	09/29/25 10:10	10
Thallium	ND		1.0	0.51	ug/L		09/25/25 14:00	09/26/25 20:56	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		09/25/25 14:00	09/26/25 14:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	**210**		5.0	2.6	mg/L			09/26/25 23:32	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**210**		5.0	2.6	mg/L			09/26/25 23:32	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			09/26/25 23:32	1
Total Dissolved Solids (SM 2540 C-2020)	**32000**		1000	780	mg/L			09/26/25 09:44	1
Chloride (EPA 300.0)	**20000**		1000	130	mg/L			09/25/25 06:09	1000
Fluoride (EPA 300.0)	ND		2.5	1.2	mg/L			09/25/25 06:00	50
Sulfate (EPA 300.0)	**270**		50	17	mg/L			09/25/25 06:00	50

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**1.04**		0.357	0.369	1.00	0.380	pCi/L	09/29/25 08:04	10/23/25 17:26	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*122*	*X*	*30 - 110*	*09/29/25 08:04*	*10/23/25 17:26*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**2.47**		0.746	0.780	1.00	0.837	pCi/L	09/29/25 08:10	10/23/25 14:27	1

Client Sample ID: 2019-07-F-20250922-01
Date Collected: 09/22/25 14:17
Date Received: 09/24/25 08:00

Lab Sample ID: 240-233653-7
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*122*	*X*	*30 - 110*	*09/29/25 08:10*	*10/23/25 14:27*	*1*
Y Carrier	*74.4*		*30 - 110*	*09/29/25 08:10*	*10/23/25 14:27*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**3.52**		0.827	0.863	5.00	0.837	pCi/L		10/23/25 09:16	1

Client Sample ID: EB-001-F-20250922-01

Date Collected: 09/22/25 15:15
Date Received: 09/24/25 08:00

Lab Sample ID: 240-233653-8

Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**1700**		100	57	ug/L		09/25/25 14:00	09/27/25 05:28	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		09/25/25 14:00	09/26/25 20:58	1
Arsenic	ND		5.0	0.75	ug/L		09/25/25 14:00	09/26/25 20:58	1
Barium	**2.0**	**J**	5.0	0.77	ug/L		09/25/25 14:00	09/26/25 20:58	1
Beryllium	ND		1.0	0.27	ug/L		09/25/25 14:00	09/26/25 20:58	1
Cadmium	ND		1.0	0.077	ug/L		09/25/25 14:00	09/26/25 20:58	1
Calcium	**400**	**J**	1000	250	ug/L		09/25/25 14:00	09/26/25 20:58	1
Chromium	ND		5.0	1.2	ug/L		09/25/25 14:00	09/26/25 20:58	1
Cobalt	ND		1.0	0.086	ug/L		09/25/25 14:00	09/26/25 20:58	1
Lead	ND		1.0	0.45	ug/L		09/25/25 14:00	09/26/25 20:58	1
Lithium	ND		8.0	3.4	ug/L		09/25/25 14:00	09/26/25 20:58	1
Magnesium	**110**	**J**	1000	61	ug/L		09/25/25 14:00	09/26/25 20:58	1
Molybdenum	ND		5.0	1.1	ug/L		09/25/25 14:00	09/26/25 20:58	1
Potassium	ND		1000	220	ug/L		09/25/25 14:00	09/26/25 20:58	1
Selenium	ND		5.0	0.89	ug/L		09/25/25 14:00	09/26/25 20:58	1
Sodium	ND		1000	880	ug/L		09/25/25 14:00	09/30/25 11:20	1
Thallium	ND		1.0	0.51	ug/L		09/25/25 14:00	09/26/25 20:58	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		09/25/25 14:00	09/26/25 14:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	**4.7**	**J**	5.0	2.6	mg/L			09/26/25 23:39	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**4.7**	**J**	5.0	2.6	mg/L			09/26/25 23:39	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			09/26/25 23:39	1
Total Dissolved Solids (SM 2540 C-2020)	**33**		10	7.8	mg/L			09/26/25 09:44	1
Chloride (EPA 300.0)	ND		1.0	0.13	mg/L			09/25/25 03:31	1
Fluoride (EPA 300.0)	ND		0.050	0.024	mg/L			09/25/25 03:31	1
Sulfate (EPA 300.0)	ND		1.0	0.35	mg/L			09/25/25 03:31	1

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.406**		0.280	0.282	1.00	0.397	pCi/L	09/29/25 08:04	10/23/25 17:26	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.1*		*30 - 110*	*09/29/25 08:04*	*10/23/25 17:26*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.723	U	0.582	0.586	1.00	0.898	pCi/L	09/29/25 08:10	10/23/25 14:27	1

Client Sample ID: EB-001-F-20250922-01
Date Collected: 09/22/25 15:15
Date Received: 09/24/25 08:00

Lab Sample ID: 240-233653-8
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.1*		*30 - 110*	*09/29/25 08:10*	*10/23/25 14:27*	*1*
Y Carrier	*84.1*		*30 - 110*	*09/29/25 08:10*	*10/23/25 14:27*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**1.13**		0.646	0.650	5.00	0.898	pCi/L		10/23/25 09:16	1

Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-233653-1
Project/Site: Federal CCR Wells

Method: 9315 - Radium 226 by GFPC

Matrix: Water **Prep Type: Total/NA**

		Percent Yield (Acceptance Limits)
		Ba
Lab Sample ID	Client Sample ID	(30-110)
240-233653-1	2022-14-F-20250919-01	95.3
240-233653-2	94139-F-20250919-01	66.7
240-233653-3	DUP-004-F-20250919-01	80.1
240-233653-4	93100-F-20250919-01	90.8
240-233653-5	2000-F-20250919-01	90.8
240-233653-6	2019-09-F-20250922-01	157 X
240-233653-7	2019-07-F-20250922-01	122 X
240-233653-8	EB-001-F-20250922-01	81.1
LCS 160-738134/2-A	Lab Control Sample	84.3
LCS 160-738138/2-A	Lab Control Sample	81.1
MB 160-738134/1-A	Method Blank	85.1
MB 160-738138/1-A	Method Blank	87.1

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	(30-110)	(30-110)
240-233653-1	2022-14-F-20250919-01	95.3	79.3
240-233653-2	94139-F-20250919-01	66.7	79.3
240-233653-3	DUP-004-F-20250919-01	80.1	80.7
240-233653-4	93100-F-20250919-01	90.8	79.3
240-233653-5	2000-F-20250919-01	90.8	78.1
240-233653-6	2019-09-F-20250922-01	157 X	76.6
240-233653-7	2019-07-F-20250922-01	122 X	74.4
240-233653-8	EB-001-F-20250922-01	81.1	84.1
LCS 160-738135/2-A	Lab Control Sample	84.3	86.4
LCS 160-738139/2-A	Lab Control Sample	81.1	82.2
MB 160-738139/1-A	Method Blank	87.1	79.6

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-673260/1-A
Matrix: Water
Analysis Batch: 673520

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 673260

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		09/25/25 14:00	09/27/25 04:11	1

Lab Sample ID: LCS 240-673260/2-A
Matrix: Water
Analysis Batch: 673520

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 673260

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Boron			1000	1120		ug/L		112	80 - 120		

Lab Sample ID: 240-233653-1 MS
Matrix: Water
Analysis Batch: 673520

Client Sample ID: 2022-14-F-20250919-01
Prep Type: Total Recoverable
Prep Batch: 673260

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Boron	410		1000	1510		ug/L		110	75 - 125		

Lab Sample ID: 240-233653-1 MSD
Matrix: Water
Analysis Batch: 673520

Client Sample ID: 2022-14-F-20250919-01
Prep Type: Total Recoverable
Prep Batch: 673260

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	410		1000	1560		ug/L		114	75 - 125	3	20

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-673260/1-A
Matrix: Water
Analysis Batch: 673467

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 673260

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		09/25/25 14:00	09/26/25 20:19	1
Arsenic	ND		5.0	0.75	ug/L		09/25/25 14:00	09/26/25 20:19	1
Barium	ND		5.0	0.77	ug/L		09/25/25 14:00	09/26/25 20:19	1
Beryllium	ND		1.0	0.27	ug/L		09/25/25 14:00	09/26/25 20:19	1
Cadmium	ND		1.0	0.077	ug/L		09/25/25 14:00	09/26/25 20:19	1
Calcium	ND		1000	250	ug/L		09/25/25 14:00	09/26/25 20:19	1
Chromium	ND		5.0	1.2	ug/L		09/25/25 14:00	09/26/25 20:19	1
Cobalt	ND		1.0	0.086	ug/L		09/25/25 14:00	09/26/25 20:19	1
Lead	ND		1.0	0.45	ug/L		09/25/25 14:00	09/26/25 20:19	1
Lithium	ND		8.0	3.4	ug/L		09/25/25 14:00	09/26/25 20:19	1
Magnesium	ND		1000	61	ug/L		09/25/25 14:00	09/26/25 20:19	1
Molybdenum	1.14	J	5.0	1.1	ug/L		09/25/25 14:00	09/26/25 20:19	1
Potassium	ND		1000	220	ug/L		09/25/25 14:00	09/26/25 20:19	1
Selenium	ND		5.0	0.89	ug/L		09/25/25 14:00	09/26/25 20:19	1
Sodium	ND		1000	880	ug/L		09/25/25 14:00	09/26/25 20:19	1
Thallium	ND		1.0	0.51	ug/L		09/25/25 14:00	09/26/25 20:19	1

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

Lab Sample ID: LCS 240-673260/3-A
Matrix: Water
Analysis Batch: 673467

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 673260

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	99.6		ug/L		100	80 - 120
Arsenic	1000	949		ug/L		95	80 - 120
Barium	1000	991		ug/L		99	80 - 120
Beryllium	500	528		ug/L		106	80 - 120
Cadmium	500	479		ug/L		96	80 - 120
Calcium	25000	25100		ug/L		100	80 - 120
Chromium	500	491		ug/L		98	80 - 120
Cobalt	500	489		ug/L		98	80 - 120
Lead	500	512		ug/L		102	80 - 120
Lithium	500	514		ug/L		103	80 - 120
Magnesium	25000	25800		ug/L		103	80 - 120
Molybdenum	500	496		ug/L		99	80 - 120
Potassium	25000	25100		ug/L		100	80 - 120
Selenium	1000	967		ug/L		97	80 - 120
Sodium	25000	26000		ug/L		104	80 - 120
Thallium	1000	1020		ug/L		102	80 - 120

Lab Sample ID: 240-233653-1 MS
Matrix: Water
Analysis Batch: 673467

Client Sample ID: 2022-14-F-20250919-01
Prep Type: Total Recoverable
Prep Batch: 673260

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	ND		100	94.7		ug/L		95	80 - 120
Arsenic	1.2	J	1000	1060		ug/L		106	80 - 120
Barium	4700		1000	5690	4	ug/L		99	80 - 120
Beryllium	ND		500	461		ug/L		92	80 - 120
Cadmium	0.31	J	500	426		ug/L		85	80 - 120
Calcium	310000		25000	336000	4	ug/L		88	80 - 120
Chromium	2.8	J	500	430		ug/L		85	80 - 120
Cobalt	1.4		500	523		ug/L		104	80 - 120
Lead	2.0		500	433		ug/L		86	80 - 120
Lithium	150		500	657		ug/L		101	80 - 120
Magnesium	85000		25000	107000		ug/L		88	80 - 120
Molybdenum	19	B	500	546		ug/L		105	80 - 120
Potassium	9100		25000	32700		ug/L		95	80 - 120
Selenium	ND		1000	950		ug/L		95	80 - 120
Thallium	0.61	J	1000	878		ug/L		88	80 - 120

Lab Sample ID: 240-233653-1 MS
Matrix: Water
Analysis Batch: 673819

Client Sample ID: 2022-14-F-20250919-01
Prep Type: Total Recoverable
Prep Batch: 673260

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sodium	5700000		25000	5700000	4	ug/L		-131	80 - 120

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

Lab Sample ID: 240-233653-1 MSD
Matrix: Water
Analysis Batch: 673467

Client Sample ID: 2022-14-F-20250919-01
Prep Type: Total Recoverable
Prep Batch: 673260

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	ND		100	94.6		ug/L		95	80 - 120	0	20
Arsenic	1.2	J	1000	1080		ug/L		108	80 - 120	1	20
Barium	4700		1000	5620	4	ug/L		92	80 - 120	1	20
Beryllium	ND		500	462		ug/L		92	80 - 120	0	20
Cadmium	0.31	J	500	426		ug/L		85	80 - 120	0	20
Calcium	310000		25000	332000	4	ug/L		72	80 - 120	1	20
Chromium	2.8	J	500	432		ug/L		86	80 - 120	0	20
Cobalt	1.4		500	534		ug/L		106	80 - 120	2	20
Lead	2.0		500	435		ug/L		86	80 - 120	0	20
Lithium	150		500	650		ug/L		100	80 - 120	1	20
Magnesium	85000		25000	107000		ug/L		88	80 - 120	0	20
Molybdenum	19	B	500	553		ug/L		107	80 - 120	1	20
Potassium	9100		25000	33100		ug/L		96	80 - 120	1	20
Selenium	ND		1000	952		ug/L		95	80 - 120	0	20
Thallium	0.61	J	1000	877		ug/L		88	80 - 120	0	20

Lab Sample ID: 240-233653-1 MSD
Matrix: Water
Analysis Batch: 673819

Client Sample ID: 2022-14-F-20250919-01
Prep Type: Total Recoverable
Prep Batch: 673260

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sodium	5700000		25000	5580000	4	ug/L		-625	80 - 120	2	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-673275/1-A
Matrix: Water
Analysis Batch: 673532

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 673275

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		09/25/25 14:00	09/26/25 13:34	1

Lab Sample ID: LCS 240-673275/2-A
Matrix: Water
Analysis Batch: 673532

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 673275

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	4.68		ug/L		94	80 - 120

Method: 2320 B-2021 - Alkalinity

Lab Sample ID: MB 240-673688/56
Matrix: Water
Analysis Batch: 673688

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	ND		5.0	2.6	mg/L			09/26/25 18:25	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			09/26/25 18:25	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			09/26/25 18:25	1

Method: 2320 B-2021 - Alkalinity (Continued)

Lab Sample ID: MB 240-673688/83
Matrix: Water
Analysis Batch: 673688

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	ND		5.0	2.6	mg/L			09/26/25 21:43	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			09/26/25 21:43	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			09/26/25 21:43	1

Lab Sample ID: LCS 240-673688/82
Matrix: Water
Analysis Batch: 673688

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	280	259		mg/L		93	86 - 123

Lab Sample ID: 240-233653-5 DU
Matrix: Water
Analysis Batch: 673688

Client Sample ID: 2000-F-20250919-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity	390		390		mg/L		0	20
Bicarbonate Alkalinity as CaCO3	360		347		mg/L		3	20
Carbonate Alkalinity as CaCO3	34		43.4	F3	mg/L		25	20

Method: 2540 C-2020 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 240-673238/1
Matrix: Water
Analysis Batch: 673238

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	ND		10	7.8	mg/L			09/25/25 09:40	1

Lab Sample ID: LCS 240-673238/2
Matrix: Water
Analysis Batch: 673238

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	176	163		mg/L		93	80 - 120

Lab Sample ID: MB 240-673425/1
Matrix: Water
Analysis Batch: 673425

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	ND		10	7.8	mg/L			09/26/25 09:44	1

Lab Sample ID: LCS 240-673425/2
Matrix: Water
Analysis Batch: 673425

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	176	165		mg/L		94	80 - 120

Method: 2540 C-2020 - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: 240-233653-8 DU
Matrix: Water
Analysis Batch: 673425

Client Sample ID: EB-001-F-20250922-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	33		32.0		mg/L		3	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-673156/3
Matrix: Water
Analysis Batch: 673156

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.13	mg/L			09/25/25 02:12	1
Fluoride	ND		0.050	0.024	mg/L			09/25/25 02:12	1
Sulfate	ND		1.0	0.35	mg/L			09/25/25 02:12	1

Lab Sample ID: LCS 240-673156/4
Matrix: Water
Analysis Batch: 673156

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	49.3		mg/L		99	90 - 110
Fluoride	2.50	2.53		mg/L		101	90 - 110
Sulfate	50.0	49.3		mg/L		99	90 - 110

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-738134/1-A
Matrix: Water
Analysis Batch: 741935

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 738134

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.01582	U	0.157	0.157	1.00	0.318	pCi/L	09/29/25 08:04	10/23/25 17:14	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.1*		*30 - 110*	*09/29/25 08:04*	*10/23/25 17:14*	*1*

Lab Sample ID: LCS 160-738134/2-A
Matrix: Water
Analysis Batch: 741935

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 738134

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226	9.57	9.109		1.25	1.00	0.443	pCi/L	95	75 - 125

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*84.3*		*30 - 110*

Method: 9315 - Radium 226 by GFPC (Continued)

Lab Sample ID: MB 160-738138/1-A
Matrix: Water
Analysis Batch: 741550

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 738138

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.01777	U	0.0754	0.0755	1.00	0.147	pCi/L	09/29/25 08:21	10/21/25 07:47	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.1*		*30 - 110*	*09/29/25 08:21*	*10/21/25 07:47*	*1*

Lab Sample ID: LCS 160-738138/2-A
Matrix: Water
Analysis Batch: 741550

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 738138

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-226			9.57	9.805		1.10	1.00	0.183	pCi/L	102	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*81.1*		*30 - 110*

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: LCS 160-738135/2-A
Matrix: Water
Analysis Batch: 741935

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 738135

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228			7.99	9.957		1.35	1.00	0.577	pCi/L	125	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*84.3*		*30 - 110*
Y Carrier	*86.4*		*30 - 110*

Lab Sample ID: MB 160-738139/1-A
Matrix: Water
Analysis Batch: 741146

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 738139

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.3694	U	0.442	0.443	1.00	0.730	pCi/L	09/29/25 08:27	10/17/25 11:52	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.1*		*30 - 110*	*09/29/25 08:27*	*10/17/25 11:52*	*1*
Y Carrier	*79.6*		*30 - 110*	*09/29/25 08:27*	*10/17/25 11:52*	*1*

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

Lab Sample ID: LCS 160-738139/2-A
Matrix: Water
Analysis Batch: 741146

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 738139

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228			8.01	10.16		1.45	1.00	0.640	pCi/L	127	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*81.1*		*30 - 110*
Y Carrier	*82.2*		*30 - 110*

Metals

Prep Batch: 673260

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233653-1	2022-14-F-20250919-01	Total Recoverable	Water	3005A	
240-233653-2	94139-F-20250919-01	Total Recoverable	Water	3005A	
240-233653-3	DUP-004-F-20250919-01	Total Recoverable	Water	3005A	
240-233653-4	93100-F-20250919-01	Total Recoverable	Water	3005A	
240-233653-5	2000-F-20250919-01	Total Recoverable	Water	3005A	
240-233653-6	2019-09-F-20250922-01	Total Recoverable	Water	3005A	
240-233653-7	2019-07-F-20250922-01	Total Recoverable	Water	3005A	
240-233653-8	EB-001-F-20250922-01	Total Recoverable	Water	3005A	
MB 240-673260/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-673260/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-673260/3-A	Lab Control Sample	Total Recoverable	Water	3005A	
240-233653-1 MS	2022-14-F-20250919-01	Total Recoverable	Water	3005A	
240-233653-1 MS	2022-14-F-20250919-01	Total Recoverable	Water	3005A	
240-233653-1 MSD	2022-14-F-20250919-01	Total Recoverable	Water	3005A	
240-233653-1 MSD	2022-14-F-20250919-01	Total Recoverable	Water	3005A	

Prep Batch: 673275

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233653-1	2022-14-F-20250919-01	Total/NA	Water	7470A	
240-233653-2	94139-F-20250919-01	Total/NA	Water	7470A	
240-233653-3	DUP-004-F-20250919-01	Total/NA	Water	7470A	
240-233653-4	93100-F-20250919-01	Total/NA	Water	7470A	
240-233653-5	2000-F-20250919-01	Total/NA	Water	7470A	
240-233653-6	2019-09-F-20250922-01	Total/NA	Water	7470A	
240-233653-7	2019-07-F-20250922-01	Total/NA	Water	7470A	
240-233653-8	EB-001-F-20250922-01	Total/NA	Water	7470A	
MB 240-673275/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-673275/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 673467

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233653-1	2022-14-F-20250919-01	Total Recoverable	Water	6020B	673260
240-233653-2	94139-F-20250919-01	Total Recoverable	Water	6020B	673260
240-233653-3	DUP-004-F-20250919-01	Total Recoverable	Water	6020B	673260
240-233653-4	93100-F-20250919-01	Total Recoverable	Water	6020B	673260
240-233653-5	2000-F-20250919-01	Total Recoverable	Water	6020B	673260
240-233653-6	2019-09-F-20250922-01	Total Recoverable	Water	6020B	673260
240-233653-7	2019-07-F-20250922-01	Total Recoverable	Water	6020B	673260
240-233653-8	EB-001-F-20250922-01	Total Recoverable	Water	6020B	673260
MB 240-673260/1-A	Method Blank	Total Recoverable	Water	6020B	673260
LCS 240-673260/3-A	Lab Control Sample	Total Recoverable	Water	6020B	673260
240-233653-1 MS	2022-14-F-20250919-01	Total Recoverable	Water	6020B	673260
240-233653-1 MSD	2022-14-F-20250919-01	Total Recoverable	Water	6020B	673260

Analysis Batch: 673520

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233653-1	2022-14-F-20250919-01	Total Recoverable	Water	6010D	673260
240-233653-2	94139-F-20250919-01	Total Recoverable	Water	6010D	673260
240-233653-3	DUP-004-F-20250919-01	Total Recoverable	Water	6010D	673260
240-233653-4	93100-F-20250919-01	Total Recoverable	Water	6010D	673260
240-233653-5	2000-F-20250919-01	Total Recoverable	Water	6010D	673260

Metals (Continued)

Analysis Batch: 673520 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233653-6	2019-09-F-20250922-01	Total Recoverable	Water	6010D	673260
240-233653-7	2019-07-F-20250922-01	Total Recoverable	Water	6010D	673260
240-233653-8	EB-001-F-20250922-01	Total Recoverable	Water	6010D	673260
MB 240-673260/1-A	Method Blank	Total Recoverable	Water	6010D	673260
LCS 240-673260/2-A	Lab Control Sample	Total Recoverable	Water	6010D	673260
240-233653-1 MS	2022-14-F-20250919-01	Total Recoverable	Water	6010D	673260
240-233653-1 MSD	2022-14-F-20250919-01	Total Recoverable	Water	6010D	673260

Analysis Batch: 673532

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233653-1	2022-14-F-20250919-01	Total/NA	Water	7470A	673275
240-233653-2	94139-F-20250919-01	Total/NA	Water	7470A	673275
240-233653-3	DUP-004-F-20250919-01	Total/NA	Water	7470A	673275
240-233653-4	93100-F-20250919-01	Total/NA	Water	7470A	673275
240-233653-5	2000-F-20250919-01	Total/NA	Water	7470A	673275
240-233653-6	2019-09-F-20250922-01	Total/NA	Water	7470A	673275
240-233653-7	2019-07-F-20250922-01	Total/NA	Water	7470A	673275
240-233653-8	EB-001-F-20250922-01	Total/NA	Water	7470A	673275
MB 240-673275/1-A	Method Blank	Total/NA	Water	7470A	673275
LCS 240-673275/2-A	Lab Control Sample	Total/NA	Water	7470A	673275

Analysis Batch: 673819

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233653-1	2022-14-F-20250919-01	Total Recoverable	Water	6020B	673260
240-233653-4	93100-F-20250919-01	Total Recoverable	Water	6020B	673260
240-233653-6	2019-09-F-20250922-01	Total Recoverable	Water	6020B	673260
240-233653-6	2019-09-F-20250922-01	Total Recoverable	Water	6020B	673260
240-233653-7	2019-07-F-20250922-01	Total Recoverable	Water	6020B	673260
240-233653-1 MS	2022-14-F-20250919-01	Total Recoverable	Water	6020B	673260
240-233653-1 MSD	2022-14-F-20250919-01	Total Recoverable	Water	6020B	673260

Analysis Batch: 673947

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233653-8	EB-001-F-20250922-01	Total Recoverable	Water	6020B	673260

General Chemistry

Analysis Batch: 673156

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233653-1	2022-14-F-20250919-01	Total/NA	Water	300.0	
240-233653-1	2022-14-F-20250919-01	Total/NA	Water	300.0	
240-233653-2	94139-F-20250919-01	Total/NA	Water	300.0	
240-233653-2	94139-F-20250919-01	Total/NA	Water	300.0	
240-233653-3	DUP-004-F-20250919-01	Total/NA	Water	300.0	
240-233653-3	DUP-004-F-20250919-01	Total/NA	Water	300.0	
240-233653-4	93100-F-20250919-01	Total/NA	Water	300.0	
240-233653-4	93100-F-20250919-01	Total/NA	Water	300.0	
240-233653-5	2000-F-20250919-01	Total/NA	Water	300.0	
240-233653-5	2000-F-20250919-01	Total/NA	Water	300.0	
240-233653-6	2019-09-F-20250922-01	Total/NA	Water	300.0	
240-233653-6	2019-09-F-20250922-01	Total/NA	Water	300.0	

General Chemistry (Continued)

Analysis Batch: 673156 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233653-7	2019-07-F-20250922-01	Total/NA	Water	300.0	
240-233653-7	2019-07-F-20250922-01	Total/NA	Water	300.0	
240-233653-8	EB-001-F-20250922-01	Total/NA	Water	300.0	
MB 240-673156/3	Method Blank	Total/NA	Water	300.0	
LCS 240-673156/4	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 673238

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233653-1	2022-14-F-20250919-01	Total/NA	Water	2540 C-2020	
240-233653-2	94139-F-20250919-01	Total/NA	Water	2540 C-2020	
240-233653-3	DUP-004-F-20250919-01	Total/NA	Water	2540 C-2020	
240-233653-4	93100-F-20250919-01	Total/NA	Water	2540 C-2020	
240-233653-5	2000-F-20250919-01	Total/NA	Water	2540 C-2020	
MB 240-673238/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-673238/2	Lab Control Sample	Total/NA	Water	2540 C-2020	

Analysis Batch: 673425

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233653-6	2019-09-F-20250922-01	Total/NA	Water	2540 C-2020	
240-233653-7	2019-07-F-20250922-01	Total/NA	Water	2540 C-2020	
240-233653-8	EB-001-F-20250922-01	Total/NA	Water	2540 C-2020	
MB 240-673425/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-673425/2	Lab Control Sample	Total/NA	Water	2540 C-2020	
240-233653-8 DU	EB-001-F-20250922-01	Total/NA	Water	2540 C-2020	

Analysis Batch: 673688

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233653-1	2022-14-F-20250919-01	Total/NA	Water	2320 B-2021	
240-233653-2	94139-F-20250919-01	Total/NA	Water	2320 B-2021	
240-233653-3	DUP-004-F-20250919-01	Total/NA	Water	2320 B-2021	
240-233653-4	93100-F-20250919-01	Total/NA	Water	2320 B-2021	
240-233653-5	2000-F-20250919-01	Total/NA	Water	2320 B-2021	
240-233653-6	2019-09-F-20250922-01	Total/NA	Water	2320 B-2021	
240-233653-7	2019-07-F-20250922-01	Total/NA	Water	2320 B-2021	
240-233653-8	EB-001-F-20250922-01	Total/NA	Water	2320 B-2021	
MB 240-673688/56	Method Blank	Total/NA	Water	2320 B-2021	
MB 240-673688/83	Method Blank	Total/NA	Water	2320 B-2021	
LCS 240-673688/82	Lab Control Sample	Total/NA	Water	2320 B-2021	
240-233653-5 DU	2000-F-20250919-01	Total/NA	Water	2320 B-2021	

Rad

Prep Batch: 738134

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233653-3	DUP-004-F-20250919-01	Total/NA	Water	PrecSep-21	
240-233653-4	93100-F-20250919-01	Total/NA	Water	PrecSep-21	
240-233653-5	2000-F-20250919-01	Total/NA	Water	PrecSep-21	
240-233653-6	2019-09-F-20250922-01	Total/NA	Water	PrecSep-21	
240-233653-7	2019-07-F-20250922-01	Total/NA	Water	PrecSep-21	
240-233653-8	EB-001-F-20250922-01	Total/NA	Water	PrecSep-21	
MB 160-738134/1-A	Method Blank	Total/NA	Water	PrecSep-21	

Rad (Continued)

Prep Batch: 738134 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 160-738134/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 738135

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233653-3	DUP-004-F-20250919-01	Total/NA	Water	PrecSep_0	
240-233653-4	93100-F-20250919-01	Total/NA	Water	PrecSep_0	
240-233653-5	2000-F-20250919-01	Total/NA	Water	PrecSep_0	
240-233653-6	2019-09-F-20250922-01	Total/NA	Water	PrecSep_0	
240-233653-7	2019-07-F-20250922-01	Total/NA	Water	PrecSep_0	
240-233653-8	EB-001-F-20250922-01	Total/NA	Water	PrecSep_0	
LCS 160-738135/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Prep Batch: 738138

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233653-1	2022-14-F-20250919-01	Total/NA	Water	PrecSep-21	
240-233653-2	94139-F-20250919-01	Total/NA	Water	PrecSep-21	
MB 160-738138/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-738138/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 738139

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233653-1	2022-14-F-20250919-01	Total/NA	Water	PrecSep_0	
240-233653-2	94139-F-20250919-01	Total/NA	Water	PrecSep_0	
MB 160-738139/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-738139/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-233653-1
Project/Site: Federal CCR Wells

Client Sample ID: 2022-14-F-20250919-01
Lab Sample ID: 240-233653-1

Date Collected: 09/19/25 10:55
Matrix: Water
Date Received: 09/24/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			673260	F3PF	EET CLE	09/25/25 14:00
Total Recoverable	Analysis	6010D		1	673520	AJC	EET CLE	09/27/25 04:20
Total Recoverable	Prep	3005A			673260	F3PF	EET CLE	09/25/25 14:00
Total Recoverable	Analysis	6020B		1	673467	S4FJ	EET CLE	09/26/25 20:24
Total Recoverable	Prep	3005A			673260	F3PF	EET CLE	09/25/25 14:00
Total Recoverable	Analysis	6020B		10	673819	S4FJ	EET CLE	09/29/25 09:54
Total/NA	Prep	7470A			673275	F3PF	EET CLE	09/25/25 14:00
Total/NA	Analysis	7470A		1	673532	BN	EET CLE	09/26/25 14:09
Total/NA	Analysis	2320 B-2021		1	673688	PQD2	EET CLE	09/26/25 22:35
Total/NA	Analysis	2540 C-2020		1	673238	AAP	EET CLE	09/25/25 09:40
Total/NA	Analysis	300.0		10	673156	JMR	EET CLE	09/25/25 05:08
Total/NA	Analysis	300.0		100	673156	JMR	EET CLE	09/25/25 05:16
Total/NA	Prep	PrecSep-21			738138	JTR	EET SL	09/29/25 08:21
Total/NA	Analysis	9315		1	741557	FLC	EET SL	10/21/25 08:04
Total/NA	Prep	PrecSep_0			738139	JTR	EET SL	09/29/25 08:27
Total/NA	Analysis	9320		1	741119	SWS	EET SL	10/17/25 12:03
Total/NA	Analysis	Ra226_Ra228		1	741566	SCB	EET SL	10/21/25 12:22

Client Sample ID: 94139-F-20250919-01
Lab Sample ID: 240-233653-2

Date Collected: 09/19/25 12:20
Matrix: Water
Date Received: 09/24/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			673260	F3PF	EET CLE	09/25/25 14:00
Total Recoverable	Analysis	6010D		1	673520	AJC	EET CLE	09/27/25 04:52
Total Recoverable	Prep	3005A			673260	F3PF	EET CLE	09/25/25 14:00
Total Recoverable	Analysis	6020B		1	673467	S4FJ	EET CLE	09/26/25 20:37
Total/NA	Prep	7470A			673275	F3PF	EET CLE	09/25/25 14:00
Total/NA	Analysis	7470A		1	673532	BN	EET CLE	09/26/25 14:10
Total/NA	Analysis	2320 B-2021		1	673688	PQD2	EET CLE	09/26/25 22:42
Total/NA	Analysis	2540 C-2020		1	673238	AAP	EET CLE	09/25/25 09:40
Total/NA	Analysis	300.0		1	673156	JMR	EET CLE	09/25/25 03:58
Total/NA	Analysis	300.0		10	673156	JMR	EET CLE	09/25/25 04:07
Total/NA	Prep	PrecSep-21			738138	JTR	EET SL	09/29/25 08:21
Total/NA	Analysis	9315		1	741557	FLC	EET SL	10/21/25 08:04
Total/NA	Prep	PrecSep_0			738139	JTR	EET SL	09/29/25 08:27
Total/NA	Analysis	9320		1	741119	SWS	EET SL	10/17/25 12:03
Total/NA	Analysis	Ra226_Ra228		1	741566	SCB	EET SL	10/21/25 12:22

Client Sample ID: DUP-004-F-20250919-01

Lab Sample ID: 240-233653-3

Date Collected: 09/19/25 00:00

Matrix: Water

Date Received: 09/24/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			673260	F3PF	EET CLE	09/25/25 14:00
Total Recoverable	Analysis	6010D		1	673520	AJC	EET CLE	09/27/25 04:56
Total Recoverable	Prep	3005A			673260	F3PF	EET CLE	09/25/25 14:00
Total Recoverable	Analysis	6020B		1	673467	S4FJ	EET CLE	09/26/25 20:40
Total/NA	Prep	7470A			673275	F3PF	EET CLE	09/25/25 14:00
Total/NA	Analysis	7470A		1	673532	BN	EET CLE	09/26/25 14:12
Total/NA	Analysis	2320 B-2021		1	673688	PQD2	EET CLE	09/26/25 22:50
Total/NA	Analysis	2540 C-2020		1	673238	AAP	EET CLE	09/25/25 09:40
Total/NA	Analysis	300.0		1	673156	JMR	EET CLE	09/25/25 04:15
Total/NA	Analysis	300.0		10	673156	JMR	EET CLE	09/25/25 04:24
Total/NA	Prep	PrecSep-21			738134	JTR	EET SL	09/29/25 08:04
Total/NA	Analysis	9315		1	741935	SWS	EET SL	10/23/25 17:17
Total/NA	Prep	PrecSep_0			738135	JTR	EET SL	09/29/25 08:10
Total/NA	Analysis	9320		1	741937	SWS	EET SL	10/23/25 14:26
Total/NA	Analysis	Ra226_Ra228		1	741781	SCB	EET SL	10/23/25 09:16

Client Sample ID: 93100-F-20250919-01

Lab Sample ID: 240-233653-4

Date Collected: 09/19/25 13:25

Matrix: Water

Date Received: 09/24/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			673260	F3PF	EET CLE	09/25/25 14:00
Total Recoverable	Analysis	6010D		1	673520	AJC	EET CLE	09/27/25 05:01
Total Recoverable	Prep	3005A			673260	F3PF	EET CLE	09/25/25 14:00
Total Recoverable	Analysis	6020B		1	673467	S4FJ	EET CLE	09/26/25 20:48
Total Recoverable	Prep	3005A			673260	F3PF	EET CLE	09/25/25 14:00
Total Recoverable	Analysis	6020B		10	673819	S4FJ	EET CLE	09/29/25 10:05
Total/NA	Prep	7470A			673275	F3PF	EET CLE	09/25/25 14:00
Total/NA	Analysis	7470A		1	673532	BN	EET CLE	09/26/25 14:14
Total/NA	Analysis	2320 B-2021		1	673688	PQD2	EET CLE	09/26/25 22:59
Total/NA	Analysis	2540 C-2020		1	673238	AAP	EET CLE	09/25/25 09:40
Total/NA	Analysis	300.0		5	673156	JMR	EET CLE	09/25/25 04:50
Total/NA	Analysis	300.0		20	673156	JMR	EET CLE	09/25/25 04:59
Total/NA	Prep	PrecSep-21			738134	JTR	EET SL	09/29/25 08:04
Total/NA	Analysis	9315		1	741935	SWS	EET SL	10/23/25 17:17
Total/NA	Prep	PrecSep_0			738135	JTR	EET SL	09/29/25 08:10
Total/NA	Analysis	9320		1	741937	SWS	EET SL	10/23/25 14:27
Total/NA	Analysis	Ra226_Ra228		1	741781	SCB	EET SL	10/23/25 09:16

Client Sample ID: 2000-F-20250919-01
Lab Sample ID: 240-233653-5

Date Collected: 09/19/25 14:50
Matrix: Water
Date Received: 09/24/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			673260	F3PF	EET CLE	09/25/25 14:00
Total Recoverable	Analysis	6010D		1	673520	AJC	EET CLE	09/27/25 05:05
Total Recoverable	Prep	3005A			673260	F3PF	EET CLE	09/25/25 14:00
Total Recoverable	Analysis	6020B		1	673467	S4FJ	EET CLE	09/26/25 20:50
Total/NA	Prep	7470A			673275	F3PF	EET CLE	09/25/25 14:00
Total/NA	Analysis	7470A		1	673532	BN	EET CLE	09/26/25 14:16
Total/NA	Analysis	2320 B-2021		1	673688	PQD2	EET CLE	09/26/25 23:07
Total/NA	Analysis	2540 C-2020		1	673238	AAP	EET CLE	09/25/25 09:40
Total/NA	Analysis	300.0		1	673156	JMR	EET CLE	09/25/25 04:32
Total/NA	Analysis	300.0		10	673156	JMR	EET CLE	09/25/25 04:42
Total/NA	Prep	PrecSep-21			738134	JTR	EET SL	09/29/25 08:04
Total/NA	Analysis	9315		1	741937	SWS	EET SL	10/23/25 17:26
Total/NA	Prep	PrecSep_0			738135	JTR	EET SL	09/29/25 08:10
Total/NA	Analysis	9320		1	741937	SWS	EET SL	10/23/25 14:27
Total/NA	Analysis	Ra226_Ra228		1	741781	SCB	EET SL	10/23/25 09:16

Client Sample ID: 2019-09-F-20250922-01
Lab Sample ID: 240-233653-6

Date Collected: 09/22/25 12:51
Matrix: Water
Date Received: 09/24/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			673260	F3PF	EET CLE	09/25/25 14:00
Total Recoverable	Analysis	6010D		1	673520	AJC	EET CLE	09/27/25 05:10
Total Recoverable	Prep	3005A			673260	F3PF	EET CLE	09/25/25 14:00
Total Recoverable	Analysis	6020B		1	673467	S4FJ	EET CLE	09/26/25 20:53
Total Recoverable	Prep	3005A			673260	F3PF	EET CLE	09/25/25 14:00
Total Recoverable	Analysis	6020B		10	673819	S4FJ	EET CLE	09/29/25 10:08
Total Recoverable	Prep	3005A			673260	F3PF	EET CLE	09/25/25 14:00
Total Recoverable	Analysis	6020B		50	673819	S4FJ	EET CLE	09/29/25 10:16
Total/NA	Prep	7470A			673275	F3PF	EET CLE	09/25/25 14:00
Total/NA	Analysis	7470A		1	673532	BN	EET CLE	09/26/25 14:17
Total/NA	Analysis	2320 B-2021		1	673688	PQD2	EET CLE	09/26/25 23:25
Total/NA	Analysis	2540 C-2020		1	673425	TAV2	EET CLE	09/26/25 09:44
Total/NA	Analysis	300.0		50	673156	JMR	EET CLE	09/25/25 05:43
Total/NA	Analysis	300.0		1000	673156	JMR	EET CLE	09/25/25 05:51
Total/NA	Prep	PrecSep-21			738134	JTR	EET SL	09/29/25 08:04
Total/NA	Analysis	9315		1	741937	SWS	EET SL	10/23/25 17:26
Total/NA	Prep	PrecSep_0			738135	JTR	EET SL	09/29/25 08:10
Total/NA	Analysis	9320		1	741937	SWS	EET SL	10/23/25 14:27
Total/NA	Analysis	Ra226_Ra228		1	741781	SCB	EET SL	10/23/25 09:16

Client Sample ID: 2019-07-F-20250922-01
Lab Sample ID: 240-233653-7

Date Collected: 09/22/25 14:17
Matrix: Water
Date Received: 09/24/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			673260	F3PF	EET CLE	09/25/25 14:00
Total Recoverable	Analysis	6010D		1	673520	AJC	EET CLE	09/27/25 05:15
Total Recoverable	Prep	3005A			673260	F3PF	EET CLE	09/25/25 14:00
Total Recoverable	Analysis	6020B		1	673467	S4FJ	EET CLE	09/26/25 20:56
Total Recoverable	Prep	3005A			673260	F3PF	EET CLE	09/25/25 14:00
Total Recoverable	Analysis	6020B		10	673819	S4FJ	EET CLE	09/29/25 10:10
Total/NA	Prep	7470A			673275	F3PF	EET CLE	09/25/25 14:00
Total/NA	Analysis	7470A		1	673532	BN	EET CLE	09/26/25 14:19
Total/NA	Analysis	2320 B-2021		1	673688	PQD2	EET CLE	09/26/25 23:32
Total/NA	Analysis	2540 C-2020		1	673425	TAV2	EET CLE	09/26/25 09:44
Total/NA	Analysis	300.0		50	673156	JMR	EET CLE	09/25/25 06:00
Total/NA	Analysis	300.0		1000	673156	JMR	EET CLE	09/25/25 06:09
Total/NA	Prep	PrecSep-21			738134	JTR	EET SL	09/29/25 08:04
Total/NA	Analysis	9315		1	741937	SWS	EET SL	10/23/25 17:26
Total/NA	Prep	PrecSep_0			738135	JTR	EET SL	09/29/25 08:10
Total/NA	Analysis	9320		1	741937	SWS	EET SL	10/23/25 14:27
Total/NA	Analysis	Ra226_Ra228		1	741781	SCB	EET SL	10/23/25 09:16

Client Sample ID: EB-001-F-20250922-01
Lab Sample ID: 240-233653-8

Date Collected: 09/22/25 15:15
Matrix: Water
Date Received: 09/24/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			673260	F3PF	EET CLE	09/25/25 14:00
Total Recoverable	Analysis	6010D		1	673520	AJC	EET CLE	09/27/25 05:28
Total Recoverable	Prep	3005A			673260	F3PF	EET CLE	09/25/25 14:00
Total Recoverable	Analysis	6020B		1	673467	S4FJ	EET CLE	09/26/25 20:58
Total Recoverable	Prep	3005A			673260	F3PF	EET CLE	09/25/25 14:00
Total Recoverable	Analysis	6020B		1	673947	S4FJ	EET CLE	09/30/25 11:20
Total/NA	Prep	7470A			673275	F3PF	EET CLE	09/25/25 14:00
Total/NA	Analysis	7470A		1	673532	BN	EET CLE	09/26/25 14:21
Total/NA	Analysis	2320 B-2021		1	673688	PQD2	EET CLE	09/26/25 23:39
Total/NA	Analysis	2540 C-2020		1	673425	TAV2	EET CLE	09/26/25 09:44
Total/NA	Analysis	300.0		1	673156	JMR	EET CLE	09/25/25 03:31
Total/NA	Prep	PrecSep-21			738134	JTR	EET SL	09/29/25 08:04
Total/NA	Analysis	9315		1	741937	SWS	EET SL	10/23/25 17:26
Total/NA	Prep	PrecSep_0			738135	JTR	EET SL	09/29/25 08:10
Total/NA	Analysis	9320		1	741937	SWS	EET SL	10/23/25 14:27
Total/NA	Analysis	Ra226_Ra228		1	741781	SCB	EET SL	10/23/25 09:16

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

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

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-233653-1
Project/Site: Federal CCR Wells

Laboratory: Eurofins Cleveland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0806	12-31-26
Georgia	State	4062	02-27-26
Illinois	NELAP	200004	08-31-26
Iowa	State	421	06-01-27
Kansas	NELAP	E-10336	01-31-26
Kentucky (UST)	State	112225	02-28-26
Kentucky (WW)	State	KY98016	12-31-25
Minnesota	NELAP	039-999-348	12-31-25
New Hampshire	NELAP	2250	09-30-25
New Jersey	NELAP	OH001	06-30-26
New York	NELAP	10975	04-01-26
North Dakota	State	R-244	02-27-26
Ohio	State	8303	11-04-25
Ohio VAP	State	ORELAP 4062	02-28-26
Oregon	NELAP	4062	10-15-25
Pennsylvania	NELAP	68-00340	08-31-26
Texas	NELAP	T104704517	08-31-26
US Fish & Wildlife	US Federal Programs	A26406	02-28-26
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	09-14-26
West Virginia DEP	State	210	12-31-25
Wisconsin	State	399167560	08-31-26

Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-27
ANAB	Dept. of Defense ELAP	L2305	04-06-27
ANAB	Dept. of Energy	L2305.01	04-06-27
ANAB	ISO/IEC 17025	L2305	04-06-27
Arizona	State	AZ0813	12-08-25
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	07-01-26
Connecticut	State	PH-0241	03-31-27
Florida	NELAP	E87689	06-30-26
HI - RadChem Recognition	State	n/a	06-30-26
Illinois	NELAP	200023	11-30-25
Iowa	State	373	12-01-26
Kansas	NELAP	E-10236	10-31-25
Kentucky (DW)	State	KY90125	12-31-25
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-25
Louisiana (All)	NELAP	106151	06-30-26
Louisiana (DW)	State	LA011	12-31-25
Maryland	State	310	10-01-26
Massachusetts	State	M-MO054	06-30-26
MI - RadChem Recognition	State	9005	06-30-26
Missouri	State	780	06-30-28
Nevada	State	MO00054	07-31-26

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-233653-1
Project/Site: Federal CCR Wells

Laboratory: Eurofins St. Louis (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New Jersey	NELAP	MO002	06-30-26
New Mexico	State	MO00054	06-30-26
New York	NELAP	11616	03-31-26
North Carolina (DW)	State	29700	06-30-26
North Dakota	State	R-207	06-30-25 *
Oklahoma	NELAP	9997	12-31-25
Oregon	NELAP	4157	09-01-26
Pennsylvania	NELAP	68-00540	02-28-26
South Carolina	State	85002	06-30-26
Texas	NELAP	T104704193	07-31-26
US Fish & Wildlife	US Federal Programs	058448	07-31-26
USDA	US Federal Programs	525-23-138-94730	05-18-26
Utah	NELAP	MO00054	07-31-26
Virginia	NELAP	460230	06-14-26
Washington	State	C592	08-31-26
West Virginia DEP	State	381	10-31-25

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

COLUMBUS 209

eurofins Environment Testing

Client Information	Sampler: Bobby Gusto	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s):	COC No: 240-111832-39818.1
Client Contact: Taylor Huffman	Phone: 740-373-4308	E-Mail: roxanne.cisneros@et.eurofinsus.com	State of Origin:	Page: Page 1 of 8
Company: Lightstone Generation Gavin Power LLC	PWSID	Analysis Requested		Job #:
Address: 7397 OH-7	Due Date Requested:			Preservation Codes: A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA; M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify); Other:
City: Cheshire	TAT Requested (days):			
State, Zip: OH, 45620	Compliance Project: Δ Yes Δ No			
Phone: 740-925-3171(Tel)	PO #: 2935505			
Email: taylor.huffman@lightstonegen.com	WO #:			
Project Name: Gavin CCR	Project #: 24019633			
Site: Gavin	SSOW#:			6+6, M13

240-233653 COC

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wastestoil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B, 6020, 7470A	2540C_Calcd - TDS	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	300.0_28D - Chloride, Fluoride & Sulfate	2320B - (MOD) Alkalinity														Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	N	D	N	N															
2022-14-F-20250919-01	9-19-25	1055	G	Water			1	1	2	1	1														6	
94139-F-20250919-01	9-19-25	1220	G	Water			1	1	2	1	1														6	
DUP-004-F-20250919-01	9-19-25	—	G	Water			1	1	2	1	1														6	
93100-F-20250919-01	9-19-25	1325	G	Water			1	1	2	1	1														6	
2000-F-20250919-01	9-19-25	1450	G	Water			1	1	2	1	1														6	
2019-09-F-20250922-01	9-22-25	1251	G	Water			1	1	2	1	1														6	
2019-07-F-20250922-01	9-22-25	1417	G	Water			1	1	2	1	1														6	
EB-001-F-20250922-01	9-22-25	1515	G	Water			1	1	2	1	1														6	
				Water																						
				Water																						
				Water																						

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
[signature]	9-23-25 / 0930	Kemron	Ashley McCaskey	9-23-25 1102	Euro
Relinquished by: Ashley McCaskey	Date/Time: 9-23-25 1700	Company Euro	Received by: [signature]	Date/Time: 9/23/25 0800	Company ET
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 06/08/2021

Eurofins – Cleveland Sample Receipt Form/Narrative **Login #** _____
Barberton Facility

Client Lightstone Site Name _____ Cooler unpacked by: JS

Cooler Received on 9/24/25 Opened on 9/24/25

FedEx, 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other

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

Eurofins Cooler # E 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 # _____ (CF_____°C) Observed Cooler Temp._____°C Corrected Cooler Temp _____°C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	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# HC567196
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

Labeled by: JS
Labels Verified by: JS

_____
_____
_____
_____

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 # _____

Eurofins - Cleveland Sample Receipt Multiple Cooler Form

Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
(EC) Client Box Other	IR GUN #: 13	1.2	1.4	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #:	0.6	0.8	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #:	0.9	1.1	(Wet Ice) Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None

☐ See Temperature Excursion Form

9/24/2025

Login Container Summary Report

240-233653

10/24/2025

Temperature readings _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
2022-14-F-20250919-01	240-233653-A-1	Plastic 60 mL - unpreserved				
2022-14-F-20250919-01	240-233653-B-1	Plastic 60 mL - unpreserved				
2022-14-F-20250919-01	240-233653-C-1	Plastic 500ml - unpreserved				
2022-14-F-20250919-01	240-233653-D-1	Plastic 500ml - with Nitric Acid	<2			
2022-14-F-20250919-01	240-233653 E-1	Plastic 1 liter - Nitric Acid	<2			
2022-14-F-20250919-01	240-233653-F-1	Plastic 1 liter - Nitric Acid	<2			
94139-F-20250919-01	240-233653-A-2	Plastic 60 mL - unpreserved				
94139-F-20250919-01	240-233653-B-2	Plastic 60 mL - unpreserved				
94139-F-20250919-01	240-233653-C-2	Plastic 500ml - unpreserved				
94139-F-20250919-01	240-233653-D-2	Plastic 500ml - with Nitric Acid	<2			
94139-F-20250919-01	240-233653-E-2	Plastic 1 liter - Nitric Acid	<2			
94139-F-20250919-01	240 233653-F-2	Plastic 1 liter - Nitric Acid	<2			
DUP-004 F-20250919-01	240-233653-A 3	Plastic 60 mL - unpreserved				
DUP-004-F-20250919-01	240-233653-B-3	Plastic 60 mL - unpreserved				
DUP-004-F-20250919-01	240-233653-C-3	Plastic 500ml - unpreserved				
DUP-004-F-20250919-01	240-233653-D-3	Plastic 500ml - with Nitric Acid	<2			
DUP-004 F 20250919-01	240-233653-E-3	Plastic 1 liter - Nitric Acid	<2			
DUP-004-F-20250919-01	240-233653-F-3	Plastic 1 liter - Nitric Acid	<2			
93100-F-20250919-01	240-233653 A-4	Plastic 60 mL - unpreserved				
93100-F-20250919-01	240 233653-B-4	Plastic 60 mL - unpreserved				
93100-F-20250919-01	240-233653-C-4	Plastic 500ml - unpreserved				
93100-F 20250919-01	240-233653-D-4	Plastic 500ml - with Nitric Acid	<2			
93100-F-20250919-01	240-233653 E-4	Plastic 1 liter - Nitric Acid	<2			
93100 F-20250919-01	240 233653-F-4	Plastic 1 liter - Nitric Acid	<2			
2000-F-20250919-01	240-233653-A-5	Plastic 60 mL - unpreserved				
2000 F-20250919-01	240-233653-B-5	Plastic 60 mL - unpreserved				
2000-F-20250919-01	240-233653-C-5	Plastic 500ml - unpreserved				
2000-F-20250919-01	240-233653-D-5	Plastic 500ml - with Nitric Acid	<2			
2000-F-20250919-01	240-233653-E-5	Plastic 1 liter - Nitric Acid	<2			
2000 F-20250919-01	240 233653-F-5	Plastic 1 liter Nitric Acid	<2			
2019-09 F-20250922-01	240-233653-A-6	Plastic 60 mL - unpreserved				
2019-09-F-20250922-01	240-233653-B-6	Plastic 60 mL - unpreserved				
2019-09-F-20250922-01	240-233653-C-6	Plastic 500ml - unpreserved				
2019-09-F-20250922-01	240-233653-D-6	Plastic 500ml - with Nitric Acid	<2			
2019-09-F-20250922-01	240-233653 E-6	Plastic 1 liter - Nitric Acid	<2			

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
2019-09-F-20250922-01	240-233653-F-6	Plastic 1 liter - Nitric Acid	<2			
2019-07 F 20250922-01	240-233653 A 7	Plastic 60 mL - unpreserved				
2019-07-F-20250922-01	240-233653-B-7	Plastic 60 mL - unpreserved				
2019-07-F-20250922-01	240-233653-C-7	Plastic 500ml - unpreserved				
2019-07-F-20250922-01	240-233653-D-7	Plastic 500ml - with Nitric Acid	<2			
2019-07 F-20250922-01	240-233653-E-7	Plastic 1 liter - Nitric Acid	<2			
2019-07-F-20250922-01	240-233653-F-7	Plastic 1 liter - Nitric Acid	<2			
EB-001-F-20250922-01	240-233653-A-8	Plastic 60 mL unpreserved				
EB-001-F-20250922-01	240-233653-B-8	Plastic 60 mL - unpreserved				
EB-001-F-20250922-01	240 233653-C-8	Plastic 500ml - unpreserved				
EB-001-F 20250922-01	240-233653-D-8	Plastic 500ml - with Nitric Acid	<2			
EB-001-F-20250922-01	240-233653-E-8	Plastic 1 liter - Nitric Acid	<2			
EB-001-F-20250922-01	240-233653-F-8	Plastic 1 liter Nitric Acid	<2			

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

COLUMBUS 209

eurofins Environment Testing

Client Information	Sampler: Bobby Casto	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s):	COC No. 240-111832-39818.1
Client Contact: Taylor Huffman	Phone: 740-373-4308	E-Mail: roxanne.cisneros@et.eurofinsus.com	State of Origin:	Page: Page 1 of 8
Company: Lightstone Generation Gavin Power LLC	PWSID			Job #:
Address: 7397 OH-7	Due Date Requested:			
City: Cheshire	TAT Requested (days):			
State, Zip: OH, 45620	Compliance Project: Δ Yes Δ No			
Phone: 740-925-3171(Tel)	PO #: 2935505			
Email: taylor.huffman@lightstonegen.com	WO #:			
Project Name: Gavin CCR	Project #: 24019633			
Site: Gavin	SSOW#:			

Analysis Requested

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

240-233653 COC

656, MLG

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B, 6020, 7470A D	6010B, 6020, 7470A N	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC D	300.0_28D - Chloride, Fluoride & Sulfate N	2320B - (MOD) Alkalinity N	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	N	D	N	N		
2022-14-F-20250919-01	9-19-25	1055	G	Water			1	1	2	1	1	6	
94139-F-20250919-01	9-19-25	1220	G	Water			1	1	2	1	1	6	
DUP-004-F-20250919-01	9-19-25	—	G	Water			1	1	2	1	1	6	
93100-F-20250919-01	9-19-25	1325	G	Water			1	1	2	1	1	6	
2000-F-20250919-01	9-19-25	1450	G	Water			1	1	2	1	1	6	
2019-09-F-20250922-01	9-22-25	1251	G	Water			1	1	2	1	1	6	
2019-07-F-20250922-01	9-22-25	1417	G	Water			1	1	2	1	1	6	
FB-001-F-20250922-01	9-22-25	1515	G	Water			1	1	2	1	1	6	
				Water									
				Water									
				Water									

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	[signature]	9-23-25 / 0930	Kemron	Kenley McCaskey	9-23-25 1102	Euro
2	Kenley McCaskey	9-23-25 1700	Euro	[signature] (RS)	9/23/25 0800	ET
3					9/24/25 0800	

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins – Cleveland Sample Receipt Form/Narrative Login # ._____
Barberton Facility

Client Lightstone Site Name_____ Cooler unpacked by:

Cooler Received on 9/24/25 Opened on 9/24/25

FedEx· 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other_____

Receipt After-hours Drop-off Date/Time_____ Storage Location_____

Eurofins Cooler # EC 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 # _____ (CF_____°C) Observed Cooler Temp._____°C Corrected Cooler Temp _____°C

2.	Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	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# HC567196
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

Labeled by

Labels Verified 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 # _____

Eurofins - Cleveland Sample Receipt Multiple Cooler Form

Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
(EC) Client Box Other	IR GUN #: 13	1.2	1.4	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #: _____	0.6	0.8	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #: _____	0.9	1.1	(Wet Ice) Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: _____			Wet Ice

9/24/2025

Login Container Summary Report

240-233653

10/24/2025

Temperature readings _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
2022-14 F 20250919-01	240-233653 A-1	Plastic 60 mL - unpreserved				
2022-14-F-20250919-01	240-233653-B-1	Plastic 60 mL - unpreserved				
2022-14-F-20250919-01	240-233653-C-1	Plastic 500ml - unpreserved				
2022-14-F-20250919-01	240-233653-D-1	Plastic 500ml with Nitric Acid	<2			
2022-14 F-20250919-01	240-233653-E-1	Plastic 1 liter - Nitric Acid	<2			
2022-14-F-20250919-01	240-233653-F-1	Plastic 1 liter - Nitric Acid	<2			
94139-F-20250919-01	240 233653-A-2	Plastic 60 mL - unpreserved				
94139-F-20250919-01	240-233653-B-2	Plastic 60 mL - unpreserved				
94139-F-20250919-01	240-233653-C-2	Plastic 500ml - unpreserved				
94139-F-20250919-01	240-233653-D-2	Plastic 500ml - with Nitric Acid	<2			
94139-F-20250919-01	240-233653-E-2	Plastic 1 liter - Nitric Acid	<2			
94139-F-20250919-01	240-233653-F-2	Plastic 1 liter - Nitric Acid	<2			
DUP-004-F-20250919-01	240-233653 A-3	Plastic 60 mL - unpreserved				
DUP-004-F-20250919-01	240-233653-B-3	Plastic 60 mL - unpreserved				
DUP-004-F-20250919-01	240-233653-C-3	Plastic 500ml unpreserved				
DUP-004-F-20250919-01	240-233653-D-3	Plastic 500ml - with Nitric Acid	<2			
DUP-004-F-20250919-01	240-233653-E-3	Plastic 1 liter - Nitric Acid	<2			
DUP-004-F 20250919-01	240-233653-F-3	Plastic 1 liter - Nitric Acid	<2			
93100-F 20250919-01	240-233653 A-4	Plastic 60 mL unpreserved				
93100-F-20250919-01	240-233653-B-4	Plastic 60 mL - unpreserved				
93100 F-20250919-01	240-233653-C-4	Plastic 500ml unpreserved				
93100-F-20250919-01	240-233653 D-4	Plastic 500ml - with Nitric Acid	<2			
93100-F 20250919-01	240-233653-E-4	Plastic 1 liter - Nitric Acid	<2			
93100-F-20250919-01	240 233653 F-4	Plastic 1 liter - Nitric Acid	<2			
2000-F-20250919-01	240-233653-A-5	Plastic 60 mL - unpreserved				
2000-F 20250919-01	240-233653 B 5	Plastic 60 mL unpreserved				
2000-F-20250919-01	240-233653-C-5	Plastic 500ml - unpreserved				
2000-F-20250919-01	240-233653-D-5	Plastic 500ml - with Nitric Acid	<2			
2000-F-20250919-01	240-233653 E-5	Plastic 1 liter - Nitric Acid	<2			
2000 F-20250919-01	240-233653-F-5	Plastic 1 liter - Nitric Acid	<2			
2019-09-F-20250922-01	240 233653 A-6	Plastic 60 mL - unpreserved				
2019-09 F 20250922-01	240-233653-B-6	Plastic 60 mL - unpreserved				
2019-09-F-20250922-01	240 233653-C-6	Plastic 500ml - unpreserved				
2019-09 F 20250922-01	240-233653-D-6	Plastic 500ml - with Nitric Acid	<2			
2019-09-F-20250922-01	240-233653-E-6	Plastic 1 liter - Nitric Acid	<2			

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
2019-09-F 20250922-01	240-233653-F-6	Plastic 1 liter - Nitric Acid	<2			
2019-07-F-20250922-01	240 233653-A-7	Plastic 60 mL - unpreserved				
2019-07-F-20250922-01	240-233653 B-7	Plastic 60 mL - unpreserved				
2019-07-F-20250922-01	240-233653-C-7	Plastic 500ml - unpreserved				
2019-07 F-20250922-01	240-233653-D-7	Plastic 500ml - with Nitric Acid	<2			
2019-07-F-20250922-01	240-233653-E-7	Plastic 1 liter - Nitric Acid	<2			
2019-07-F-20250922-01	240-233653-F-7	Plastic 1 liter - Nitric Acid	<2			
EB-001-F-20250922-01	240-233653 A-8	Plastic 60 mL unpreserved				
EB-001-F-20250922-01	240-233653-B-8	Plastic 60 mL - unpreserved				
EB-001 F-20250922-01	240-233653-C-8	Plastic 500ml - unpreserved				
EB-001-F-20250922-01	240-233653-D-8	Plastic 500ml - with Nitric Acid	<2			
EB-001 F-20250922-01	240-233653-E-8	Plastic 1 liter - Nitric Acid	<2			
EB-001-F-20250922-01	240-233653-F 8	Plastic 1 liter - Nitric Acid	<2			

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s): N/A	COC No: 240-208368.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: roxanne.cisneros@et.eurofinsus.com	State of Origin: Ohio	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): N/A		Job #: 240-233653-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 10/27/2025			Preservation Codes: -
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Federal CCR Wells	Project #: 24019633			
Site: N/A	SSOW#: N/A			Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9320_Ra228/PrecSep_0Radium-228 (GFPC)	9315_Ra226/PrecSep_21Radium-226 (GFPC)	Ra226Ra228_GFPCCombined Radium-226 and Radium-228	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
2022-14-F-20250919-01 (240-233653-1)	9/19/25	10:55 Eastern	G	Water			X	X	X	2	
94139-F-20250919-01 (240-233653-2)	9/19/25	12:20 Eastern	G	Water			X	X	X	2	
DUP-004-F-20250919-01 (240-233653-3)	9/19/25	Eastern	G	Water			X	X	X	2	
93100-F-20250919-01 (240-233653-4)	9/19/25	13:25 Eastern	G	Water			X	X	X	2	
2000-F-20250919-01 (240-233653-5)	9/19/25	14:50 Eastern	G	Water			X	X	X	2	
2019-09-F-20250922-01 (240-233653-6)	9/22/25	12:51 Eastern	G	Water			X	X	X	2	
2019-07-F-20250922-01 (240-233653-7)	9/22/25	14:17 Eastern	G	Water			X	X	X	2	
EB-001-F-20250922-01 (240-233653-8)	9/22/25	15:15 Eastern	G	Water			X	X	X	2	

Analysis Requested

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

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

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
JUN	9/24/25 1550	ET	[signature]	0810 SEP 25 2025	
Relinquished by:	Date/Time:	Company	Received by: Cheyenne Forrest	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: 10/10/2024

Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-233653-1

Login Number: 233653
List Number: 2
Creator: Forrest, Cheyenne L

List Source: Eurofins St. Louis
List Creation: 09/25/25 10:57 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?	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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620

Generated 10/27/2025 10:48:13 AM

JOB DESCRIPTION

Federal CCR Wells

JOB NUMBER

240-233659-1

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

myEOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization

Roxanne Cisneros

Generated
10/27/2025 10:48:13 AM

Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(330)497-9396

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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-233659-1
Project/Site: Federal CCR Wells

Qualifiers

Metals

Qualifier	Qualifier Description
^2	Calibration Blank (ICB and/or CCB) is outside acceptance 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.

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: 240-233659-1 — Eurofins Cleveland

Job Narrative
240-233659-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The sample was received on 9/24/2025 8:00 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 0.8°C, 1.1°C and 1.4°C.

Metals
Method 6020B - Total Recoverable: The continuing calibration blank (CCB) for analytical batch 240-673467 contained sodium above the reporting limit (RL). All reported samples associated with this CCB contained this analyte at a concentration greater than 10X the value found in the CCB; therefore, re-analysis of samples was not performed.MW-20-F-20250922-01 (240-233659-1)

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

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

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

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

Method Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-233659-1
Project/Site: Federal CCR Wells

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CLE
6020B	Metals (ICP/MS)	SW846	EET CLE
7470A	Mercury (CVAA)	SW846	EET CLE
2320 B-2021	Alkalinity	SM	EET CLE
2540 C-2020	Solids, Total Dissolved (TDS)	SM	EET CLE
300.0	Anions, Ion Chromatography	EPA	EET CLE
9315	Radium 226 by GFPC	SW846	EET SL
9320	Radium-228 (GFPC)	SW846	EET SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	EET SL
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CLE
7470A	Preparation, Mercury	SW846	EET CLE
PrecSep_0	Preparation, Precipitate Separation	None	EET SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	EET SL

Protocol References:

EPA = US Environmental Protection Agency

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:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

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

Sample Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-233659-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
240-233659-1	MW-20-F-20250922-01	Water	09/22/25 11:16	09/24/25 08:00	Ohio

Detection Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-233659-1

Client Sample ID: MW-20-F-20250922-01

Lab Sample ID: 240-233659-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	180		100	57	ug/L	1		6010D	Total Recoverable
Barium	17		5.0	0.77	ug/L	1		6020B	Total Recoverable
Calcium	440000		1000	250	ug/L	1		6020B	Total Recoverable
Cobalt	230		1.0	0.086	ug/L	1		6020B	Total Recoverable
Lithium	200		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	110000		1000	61	ug/L	1		6020B	Total Recoverable
Potassium	4900		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	25000	^2	1000	880	ug/L	1		6020B	Total Recoverable
Total Alkalinity	160		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	160		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	2200		20	16	mg/L	1		2540 C-2020	Total/NA
Chloride	1.5		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	1.4		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	1600		10	3.5	mg/L	10		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-20-F-20250922-01

Date Collected: 09/22/25 11:16
Date Received: 09/24/25 08:00

Lab Sample ID: 240-233659-1

Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**180**		100	57	ug/L		09/25/25 14:00	09/27/25 05:33	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		09/25/25 14:00	09/26/25 21:01	1
Arsenic	ND		5.0	0.75	ug/L		09/25/25 14:00	09/26/25 21:01	1
Barium	**17**		5.0	0.77	ug/L		09/25/25 14:00	09/26/25 21:01	1
Beryllium	ND		1.0	0.27	ug/L		09/25/25 14:00	09/26/25 21:01	1
Cadmium	ND		1.0	0.077	ug/L		09/25/25 14:00	09/26/25 21:01	1
Calcium	**440000**		1000	250	ug/L		09/25/25 14:00	09/26/25 21:01	1
Chromium	ND		5.0	1.2	ug/L		09/25/25 14:00	09/26/25 21:01	1
Cobalt	**230**		1.0	0.086	ug/L		09/25/25 14:00	09/26/25 21:01	1
Lead	ND		1.0	0.45	ug/L		09/25/25 14:00	09/26/25 21:01	1
Lithium	**200**		8.0	3.4	ug/L		09/25/25 14:00	09/26/25 21:01	1
Magnesium	**110000**		1000	61	ug/L		09/25/25 14:00	09/26/25 21:01	1
Molybdenum	ND		5.0	1.1	ug/L		09/25/25 14:00	09/26/25 21:01	1
Potassium	**4900**		1000	220	ug/L		09/25/25 14:00	09/26/25 21:01	1
Selenium	ND		5.0	0.89	ug/L		09/25/25 14:00	09/26/25 21:01	1
Sodium	**25000**	**^2**	1000	880	ug/L		09/25/25 14:00	09/26/25 21:01	1
Thallium	ND		1.0	0.51	ug/L		09/25/25 14:00	09/26/25 21:01	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		09/25/25 14:00	09/26/25 14:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	**160**		5.0	2.6	mg/L			09/26/25 23:45	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**160**		5.0	2.6	mg/L			09/26/25 23:45	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			09/26/25 23:45	1
Total Dissolved Solids (SM 2540 C-2020)	**2200**		20	16	mg/L			09/26/25 09:44	1
Chloride (EPA 300.0)	**1.5**		1.0	0.13	mg/L			09/25/25 07:37	1
Fluoride (EPA 300.0)	**1.4**		0.050	0.024	mg/L			09/25/25 07:37	1
Sulfate (EPA 300.0)	**1600**		10	3.5	mg/L			09/25/25 07:46	10

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0496	U	0.157	0.157	1.00	0.287	pCi/L	09/26/25 06:23	10/26/25 15:31	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*75.1*		*30 - 110*	*09/26/25 06:23*	*10/26/25 15:31*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.196	U	0.274	0.275	1.00	0.463	pCi/L	09/26/25 06:28	10/24/25 12:06	1

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-233659-1

Client Sample ID: MW-20-F-20250922-01
Date Collected: 09/22/25 11:16
Date Received: 09/24/25 08:00

Lab Sample ID: 240-233659-1
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*75.1*		*30 - 110*	*09/26/25 06:28*	*10/24/25 12:06*	*1*
Y Carrier	*85.6*		*30 - 110*	*09/26/25 06:28*	*10/24/25 12:06*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.246	U	0.316	0.317	5.00	0.463	pCi/L		10/24/25 16:31	1

Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-233659-1

Method: 9315 - Radium 226 by GFPC

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)
		Ba
Lab Sample ID	Client Sample ID	(30-110)
240-233659-1	MW-20-F-20250922-01	75.1
LCS 160-737821/2-A	Lab Control Sample	80.5
MB 160-737821/1-A	Method Blank	80.2

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	(30-110)	(30-110)
240-233659-1	MW-20-F-20250922-01	75.1	85.6
LCS 160-737822/2-A	Lab Control Sample	80.5	83.7
MB 160-737822/1-A	Method Blank	80.2	84.1

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-673260/1-A
Matrix: Water
Analysis Batch: 673520

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 673260

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		09/25/25 14:00	09/27/25 04:11	1

Lab Sample ID: LCS 240-673260/2-A
Matrix: Water
Analysis Batch: 673520

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 673260

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1000	1120		ug/L		112	80 - 120

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-673260/1-A
Matrix: Water
Analysis Batch: 673467

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 673260

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		09/25/25 14:00	09/26/25 20:19	1
Arsenic	ND		5.0	0.75	ug/L		09/25/25 14:00	09/26/25 20:19	1
Barium	ND		5.0	0.77	ug/L		09/25/25 14:00	09/26/25 20:19	1
Beryllium	ND		1.0	0.27	ug/L		09/25/25 14:00	09/26/25 20:19	1
Cadmium	ND		1.0	0.077	ug/L		09/25/25 14:00	09/26/25 20:19	1
Calcium	ND		1000	250	ug/L		09/25/25 14:00	09/26/25 20:19	1
Chromium	ND		5.0	1.2	ug/L		09/25/25 14:00	09/26/25 20:19	1
Cobalt	ND		1.0	0.086	ug/L		09/25/25 14:00	09/26/25 20:19	1
Lead	ND		1.0	0.45	ug/L		09/25/25 14:00	09/26/25 20:19	1
Lithium	ND		8.0	3.4	ug/L		09/25/25 14:00	09/26/25 20:19	1
Magnesium	ND		1000	61	ug/L		09/25/25 14:00	09/26/25 20:19	1
Molybdenum	1.14	J	5.0	1.1	ug/L		09/25/25 14:00	09/26/25 20:19	1
Potassium	ND		1000	220	ug/L		09/25/25 14:00	09/26/25 20:19	1
Selenium	ND		5.0	0.89	ug/L		09/25/25 14:00	09/26/25 20:19	1
Sodium	ND		1000	880	ug/L		09/25/25 14:00	09/26/25 20:19	1
Thallium	ND		1.0	0.51	ug/L		09/25/25 14:00	09/26/25 20:19	1

Lab Sample ID: LCS 240-673260/3-A
Matrix: Water
Analysis Batch: 673467

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 673260

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	99.6		ug/L		100	80 - 120
Arsenic	1000	949		ug/L		95	80 - 120
Barium	1000	991		ug/L		99	80 - 120
Beryllium	500	528		ug/L		106	80 - 120
Cadmium	500	479		ug/L		96	80 - 120
Calcium	25000	25100		ug/L		100	80 - 120
Chromium	500	491		ug/L		98	80 - 120
Cobalt	500	489		ug/L		98	80 - 120
Lead	500	512		ug/L		102	80 - 120
Lithium	500	514		ug/L		103	80 - 120
Magnesium	25000	25800		ug/L		103	80 - 120

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

Lab Sample ID: LCS 240-673260/3-A
Matrix: Water
Analysis Batch: 673467

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 673260

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Molybdenum	500	496		ug/L		99	80 - 120
Potassium	25000	25100		ug/L		100	80 - 120
Selenium	1000	967		ug/L		97	80 - 120
Sodium	25000	26000		ug/L		104	80 - 120
Thallium	1000	1020		ug/L		102	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-673275/1-A
Matrix: Water
Analysis Batch: 673532

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 673275

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		09/25/25 14:00	09/26/25 13:34	1

Lab Sample ID: LCS 240-673275/2-A
Matrix: Water
Analysis Batch: 673532

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 673275

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	4.68		ug/L		94	80 - 120

Method: 2320 B-2021 - Alkalinity

Lab Sample ID: MB 240-673688/56
Matrix: Water
Analysis Batch: 673688

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	ND		5.0	2.6	mg/L			09/26/25 18:25	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			09/26/25 18:25	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			09/26/25 18:25	1

Lab Sample ID: MB 240-673688/83
Matrix: Water
Analysis Batch: 673688

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	ND		5.0	2.6	mg/L			09/26/25 21:43	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			09/26/25 21:43	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			09/26/25 21:43	1

Lab Sample ID: LCS 240-673688/82
Matrix: Water
Analysis Batch: 673688

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	280	259		mg/L		93	86 - 123

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-233659-1

Method: 2540 C-2020 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 240-673425/1
Matrix: Water
Analysis Batch: 673425

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	ND		10	7.8	mg/L			09/26/25 09:44	1

Lab Sample ID: LCS 240-673425/2
Matrix: Water
Analysis Batch: 673425

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	176	165		mg/L		94	80 - 120

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-673156/3
Matrix: Water
Analysis Batch: 673156

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.13	mg/L			09/25/25 02:12	1
Fluoride	ND		0.050	0.024	mg/L			09/25/25 02:12	1
Sulfate	ND		1.0	0.35	mg/L			09/25/25 02:12	1

Lab Sample ID: LCS 240-673156/4
Matrix: Water
Analysis Batch: 673156

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	49.3		mg/L		99	90 - 110
Fluoride	2.50	2.53		mg/L		101	90 - 110
Sulfate	50.0	49.3		mg/L		99	90 - 110

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-737821/1-A
Matrix: Water
Analysis Batch: 742095

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 737821

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.1961	U	0.222	0.223	1.00	0.358	pCi/L	09/26/25 06:23	10/24/25 15:11	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.2*		*30 - 110*	*09/26/25 06:23*	*10/24/25 15:11*	*1*

Lab Sample ID: LCS 160-737821/2-A
Matrix: Water
Analysis Batch: 742095

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 737821

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226	9.57	8.504		1.23	1.00	0.494	pCi/L	89	75 - 125

Method: 9315 - Radium 226 by GFPC (Continued)

Lab Sample ID: LCS 160-737821/2-A
Matrix: Water
Analysis Batch: 742095

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 737821

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*80.5*		*30 - 110*

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-737822/1-A
Matrix: Water
Analysis Batch: 742101

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 737822

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.3876	U	0.388	0.390	1.00	0.625	pCi/L	09/26/25 06:28	10/24/25 12:02	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.2*		*30 - 110*	*09/26/25 06:28*	*10/24/25 12:02*	*1*
Y Carrier	*84.1*		*30 - 110*	*09/26/25 06:28*	*10/24/25 12:02*	*1*

Lab Sample ID: LCS 160-737822/2-A
Matrix: Water
Analysis Batch: 742101

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 737822

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228			7.99	8.627		1.25	1.00	0.550	pCi/L	108	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*80.5*		*30 - 110*
Y Carrier	*83.7*		*30 - 110*

Metals

Prep Batch: 673260

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233659-1	MW-20-F-20250922-01	Total Recoverable	Water	3005A	
MB 240-673260/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-673260/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-673260/3-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 673275

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233659-1	MW-20-F-20250922-01	Total/NA	Water	7470A	
MB 240-673275/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-673275/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 673467

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233659-1	MW-20-F-20250922-01	Total Recoverable	Water	6020B	673260
MB 240-673260/1-A	Method Blank	Total Recoverable	Water	6020B	673260
LCS 240-673260/3-A	Lab Control Sample	Total Recoverable	Water	6020B	673260

Analysis Batch: 673520

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233659-1	MW-20-F-20250922-01	Total Recoverable	Water	6010D	673260
MB 240-673260/1-A	Method Blank	Total Recoverable	Water	6010D	673260
LCS 240-673260/2-A	Lab Control Sample	Total Recoverable	Water	6010D	673260

Analysis Batch: 673532

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233659-1	MW-20-F-20250922-01	Total/NA	Water	7470A	673275
MB 240-673275/1-A	Method Blank	Total/NA	Water	7470A	673275
LCS 240-673275/2-A	Lab Control Sample	Total/NA	Water	7470A	673275

General Chemistry

Analysis Batch: 673156

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233659-1	MW-20-F-20250922-01	Total/NA	Water	300.0	
240-233659-1	MW-20-F-20250922-01	Total/NA	Water	300.0	
MB 240-673156/3	Method Blank	Total/NA	Water	300.0	
LCS 240-673156/4	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 673425

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233659-1	MW-20-F-20250922-01	Total/NA	Water	2540 C-2020	
MB 240-673425/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-673425/2	Lab Control Sample	Total/NA	Water	2540 C-2020	

Analysis Batch: 673688

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233659-1	MW-20-F-20250922-01	Total/NA	Water	2320 B-2021	
MB 240-673688/56	Method Blank	Total/NA	Water	2320 B-2021	
MB 240-673688/83	Method Blank	Total/NA	Water	2320 B-2021	
LCS 240-673688/82	Lab Control Sample	Total/NA	Water	2320 B-2021	

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-233659-1
Project/Site: Federal CCR Wells

Rad

Prep Batch: 737821

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233659-1	MW-20-F-20250922-01	Total/NA	Water	PrecSep-21	
MB 160-737821/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-737821/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 737822

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233659-1	MW-20-F-20250922-01	Total/NA	Water	PrecSep_0	
MB 160-737822/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-737822/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-233659-1

Client Sample ID: MW-20-F-20250922-01

Date Collected: 09/22/25 11:16
Date Received: 09/24/25 08:00

Lab Sample ID: 240-233659-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			673260	F3PF	EET CLE	09/25/25 14:00
Total Recoverable	Analysis	6010D		1	673520	AJC	EET CLE	09/27/25 05:33
Total Recoverable	Prep	3005A			673260	F3PF	EET CLE	09/25/25 14:00
Total Recoverable	Analysis	6020B		1	673467	S4FJ	EET CLE	09/26/25 21:01
Total/NA	Prep	7470A			673275	F3PF	EET CLE	09/25/25 14:00
Total/NA	Analysis	7470A		1	673532	BN	EET CLE	09/26/25 14:22
Total/NA	Analysis	2320 B-2021		1	673688	PQD2	EET CLE	09/26/25 23:45
Total/NA	Analysis	2540 C-2020		1	673425	TAV2	EET CLE	09/26/25 09:44
Total/NA	Analysis	300.0		1	673156	JMR	EET CLE	09/25/25 07:37
Total/NA	Analysis	300.0		10	673156	JMR	EET CLE	09/25/25 07:46
Total/NA	Prep	PrecSep-21			737821	MLT	EET SL	09/26/25 06:23
Total/NA	Analysis	9315		1	742160	SWS	EET SL	10/26/25 15:31
Total/NA	Prep	PrecSep_0			737822	MLT	EET SL	09/26/25 06:28
Total/NA	Analysis	9320		1	742101	SWS	EET SL	10/24/25 12:06
Total/NA	Analysis	Ra226_Ra228		1	742138	SCB	EET SL	10/24/25 16:31

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

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

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-233659-1
Project/Site: Federal CCR Wells

Laboratory: Eurofins Cleveland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0806	12-31-26
Georgia	State	4062	02-27-26
Illinois	NELAP	200004	08-31-26
Iowa	State	421	06-01-27
Kansas	NELAP	E-10336	01-31-26
Kentucky (UST)	State	112225	02-28-26
Kentucky (WW)	State	KY98016	12-31-25
Minnesota	NELAP	039-999-348	12-31-25
New Hampshire	NELAP	2250	09-30-25
New Jersey	NELAP	OH001	06-30-26
New York	NELAP	10975	04-01-26
North Dakota	State	R-244	02-27-26
Ohio	State	8303	11-04-25
Ohio VAP	State	ORELAP 4062	02-28-26
Oregon	NELAP	4062	10-15-25
Pennsylvania	NELAP	68-00340	08-31-26
Texas	NELAP	T104704517	08-31-26
US Fish & Wildlife	US Federal Programs	A26406	02-28-26
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	09-14-26
West Virginia DEP	State	210	12-31-25
Wisconsin	State	399167560	08-31-26

Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-27
ANAB	Dept. of Defense ELAP	L2305	04-06-27
ANAB	Dept. of Energy	L2305.01	04-06-27
ANAB	ISO/IEC 17025	L2305	04-06-27
Arizona	State	AZ0813	12-08-25
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	07-01-26
Connecticut	State	PH-0241	03-31-27
Florida	NELAP	E87689	06-30-26
HI - RadChem Recognition	State	n/a	06-30-26
Illinois	NELAP	200023	11-30-25
Iowa	State	373	12-01-26
Kansas	NELAP	E-10236	10-31-25
Kentucky (DW)	State	KY90125	12-31-25
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-25
Louisiana (All)	NELAP	106151	06-30-26
Louisiana (DW)	State	LA011	12-31-25
Maryland	State	310	10-01-26
Massachusetts	State	M-MO054	06-30-26
MI - RadChem Recognition	State	9005	06-30-26
Missouri	State	780	06-30-28
Nevada	State	MO00054	07-31-26

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-233659-1
Project/Site: Federal CCR Wells

Laboratory: Eurofins St. Louis (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New Jersey	NELAP	MO002	06-30-26
New Mexico	State	MO00054	06-30-26
New York	NELAP	11616	03-31-26
North Carolina (DW)	State	29700	06-30-26
North Dakota	State	R-207	06-30-25 *
Oklahoma	NELAP	9997	12-31-25
Oregon	NELAP	4157	09-01-26
Pennsylvania	NELAP	68-00540	02-28-26
South Carolina	State	85002	06-30-26
Texas	NELAP	T104704193	07-31-26
US Fish & Wildlife	US Federal Programs	058448	07-31-26
USDA	US Federal Programs	525-23-138-94730	05-18-26
Utah	NELAP	MO00054	07-31-26
Virginia	NELAP	460230	06-14-26
Washington	State	C592	08-31-26
West Virginia DEP	State	381	10-31-25

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

COLUMBUS
209

eurofins
Environment Testing

Client Information	Sampler: Bobby Casto	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s):	COC No. 240-111832-39818.1
Client Contact: Taylor Huffman	Phone: 740-373-4308	E-Mail: roxanne.cisneros@et.eurofinsus.com	State of Origin:	Page: Page 1 of 8
Company: Lightstone Generation Gavin Power LLC	PWSID			Job #:
Address: 7397 OH-7	Due Date Requested:			
City: Cheshire	TAT Requested (days):			
State, Zip: OH, 45620	Compliance Project: Δ Yes Δ No			
Phone: 740-925-3171(Tel)	PO #: 2935505			
Email: taylor.huffman@lightstonegen.com	WO #:			
Project Name: Gavin CCR	Project #: 24019633			
Site: Gavin	SSOW#:			

Analysis Requested

240-233659 COC

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B, 8020, 7470A	2540C_Calcd - TDS	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	300.0_28D - Chloride, Fluoride & Sulfate	2320B - (MOD) Alkalinity	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	N	D	N	N		
MW-20-F-20250922-01	9-22-25	1116	G	Water			1	1	2	1	1	6	
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									

656, MW3
Out St. Louis

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
	9-23-25/0930	KEMRON	Ashley McCloskey	9-23-25 1102	EURO
Ashley McCloskey	9-23-25 1700	EURO		9/24/25 0800	ET
				9/24/25	

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins – Cleveland Sample Receipt Form/Narrative Login # _____
Barberton Facility

Client Lightstone Site Name _____ Cooler unpacked by: [illegible]

Cooler Received on 9/24/25 Opened on 9/24/25

FedEx: 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other

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

Eurofins Cooler # EC 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 # _____ (CF _____ °C) Observed Cooler Temp _____ °C Corrected Cooler Temp _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	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# HC567196
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

Labeled by:

Labels Verified 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 # _____

Eurofins - Cleveland Sample Receipt Multiple Cooler Form

Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
(EC) Client Box Other	IR GUN #: 13	1.2	1.4	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #:	0.6	0.8	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #:	0.9	1.1	(Wet Ice) Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
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EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
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EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None

☐ See Temperature Excursion Form

9/24/2025

Login Container Summary Report

240-233659

10/27/2025

Temperature readings _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
MW-20 F 20250922-01	240 233659-A-1	Plastic 60 mL unpreserved				
MW-20-F-20250922-01	240-233659-B-1	Plastic 60 mL - unpreserved				
MW-20-F-20250922-01	240-233659-C-1	Plastic 500ml unpreserved				
MW-20-F-20250922-01	240 233659-D-1	Plastic 500ml - with Nitric Acid	<2			
MW-20-F-20250922-01	240-233659-E-1	Plastic 1 liter - unpreserved				
MW 20-F-20250922-01	240-233659-F-1	Plastic 1 liter - unpreserved				

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s): N/A	COC No: 240-208368.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: roxanne.cisneros@et.eurofinsus.com	State of Origin: Ohio	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): N/A		Job #: 240-233659-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 10/27/2025			
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Federal CCR Wells	Project #: 24019633			
Site: N/A	SSOW#: N/A			

Analysis Requested

Preservation Codes: -

Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9320_Ra228/PrecSep_0Radium-228 (GFPC)	9315_Ra226/PrecSep_21Radium-226 (GFPC)	Ra226Ra228_GFPCCombined Radium-226 and Radium-228	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
MW-20-F-20250922-01 (240-233659-1)	9/22/25	11:16 Eastern	G	Water			X	X	X	2	

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

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

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
JLM	9/24/25 1550	EL	[signature]	0810 SEP 25 2025	
Relinquished by:	Date/Time:	Company	Received by: Cheyenne Forrest	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: 10/10/2024

Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-233659-1

Login Number: 233659
List Number: 2
Creator: Forrest, Cheyenne L

List Source: Eurofins St. Louis
List Creation: 09/25/25 10:57 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?	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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620
Generated 10/30/2025 6:18:24 PM

JOB DESCRIPTION

Federal CCR Wells

JOB NUMBER

240-233999-1

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization

Roxanne Cisneros

Generated
10/30/2025 6:18:24 PM

Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(330)497-9396

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Definitions/Glossary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-233999-1

Qualifiers

Metals

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

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: 240-233999-1 — Eurofins Cleveland

Job Narrative
240-233999-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The sample was received on 9/27/2025 8:00 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 12 coolers at receipt time were 0.4°C, 0.4°C, 0.7°C, 0.8°C, 1.0°C, 1.1°C, 1.4°C, 1.5°C, 1.5°C, 1.6°C, 1.7°C and 12.3°C.

Receipt Exceptions
Limited volume was received for Ra226/228. The PM was contacted and lab was instructed to proceed with analyses at a reduced aliquot.

2019-06-F-20250923-01 (240-233999-1)

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

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

Gas Flow Proportional Counter
Method 9315_Ra226: Radium-226 batch 738969
The detection goal was not met for the following sample due to the reduced sample volume in prep attributed to the presence of matrix interferences: 2019-06-F-20250923-01 (240-233999-1). Analytical results are reported with the detection limit achieved.

Method 9320_Ra228: Radium 228 Batch 738970

The detection goal was not met for the following sample due to the presence of matrix interferences: 2019-06-F-20250923-01 (240-233999-1). Analytical results are reported with the detection limit achieved.

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

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

Method Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-233999-1
Project/Site: Federal CCR Wells

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CLE
6020B	Metals (ICP/MS)	SW846	EET CLE
7470A	Mercury (CVAA)	SW846	EET CLE
2320 B-2021	Alkalinity	SM	EET CLE
2540 C-2020	Solids, Total Dissolved (TDS)	SM	EET CLE
300.0	Anions, Ion Chromatography	EPA	EET CLE
9315	Radium 226 by GFPC	SW846	EET SL
9320	Radium-228 (GFPC)	SW846	EET SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	EET SL
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CLE
7470A	Preparation, Mercury	SW846	EET CLE
PrecSep_0	Preparation, Precipitate Separation	None	EET SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	EET SL

Protocol References:

EPA = US Environmental Protection Agency

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:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

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

Sample Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-233999-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
240-233999-1	2019-06-F-20250923-01	Water	09/23/25 10:46	09/27/25 08:00	Ohio

Detection Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-233999-1

Client Sample ID: 2019-06-F-20250923-01

Lab Sample ID: 240-233999-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	250		100	57	ug/L	1		6010D	Total Recoverable
Antimony	1.4	J	2.0	0.57	ug/L	1		6020B	Total Recoverable
Arsenic	6.3		5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	310		5.0	0.77	ug/L	1		6020B	Total Recoverable
Beryllium	0.89	J	1.0	0.27	ug/L	1		6020B	Total Recoverable
Cadmium	0.22	J	1.0	0.077	ug/L	1		6020B	Total Recoverable
Calcium	84000		1000	250	ug/L	1		6020B	Total Recoverable
Chromium	39		5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	7.3		1.0	0.086	ug/L	1		6020B	Total Recoverable
Lead	7.9		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	320		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	35000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	38		5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	11000		1000	220	ug/L	1		6020B	Total Recoverable
Selenium	1.6	J	5.0	0.89	ug/L	1		6020B	Total Recoverable
Sodium	2900000		10000	8800	ug/L	10		6020B	Total Recoverable
Thallium	0.85	J	1.0	0.51	ug/L	1		6020B	Total Recoverable
Total Alkalinity	380		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	380		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	7700		100	78	mg/L	1		2540 C-2020	Total/NA
Chloride	4700		50	6.4	mg/L	50		300.0	Total/NA
Fluoride	1.3		0.25	0.12	mg/L	5		300.0	Total/NA
Sulfate	230		5.0	1.7	mg/L	5		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 2019-06-F-20250923-01
Date Collected: 09/23/25 10:46
Date Received: 09/27/25 08:00

Lab Sample ID: 240-233999-1
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	250		100	57	ug/L		09/29/25 14:00	09/30/25 17:41	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.4	J	2.0	0.57	ug/L		09/29/25 14:00	09/30/25 17:43	1
Arsenic	6.3		5.0	0.75	ug/L		09/29/25 14:00	09/30/25 17:43	1
Barium	310		5.0	0.77	ug/L		09/29/25 14:00	09/30/25 17:43	1
Beryllium	0.89	J	1.0	0.27	ug/L		09/29/25 14:00	09/30/25 17:43	1
Cadmium	0.22	J	1.0	0.077	ug/L		09/29/25 14:00	09/30/25 17:43	1
Calcium	84000		1000	250	ug/L		09/29/25 14:00	09/30/25 17:43	1
Chromium	39		5.0	1.2	ug/L		09/29/25 14:00	09/30/25 17:43	1
Cobalt	7.3		1.0	0.086	ug/L		09/29/25 14:00	09/30/25 17:43	1
Lead	7.9		1.0	0.45	ug/L		09/29/25 14:00	09/30/25 17:43	1
Lithium	320		8.0	3.4	ug/L		09/29/25 14:00	09/30/25 17:43	1
Magnesium	35000		1000	61	ug/L		09/29/25 14:00	09/30/25 17:43	1
Molybdenum	38		5.0	1.1	ug/L		09/29/25 14:00	09/30/25 17:43	1
Potassium	11000		1000	220	ug/L		09/29/25 14:00	09/30/25 17:43	1
Selenium	1.6	J	5.0	0.89	ug/L		09/29/25 14:00	09/30/25 17:43	1
Sodium	2900000		10000	8800	ug/L		09/29/25 14:00	10/02/25 00:03	10
Thallium	0.85	J	1.0	0.51	ug/L		09/29/25 14:00	09/30/25 17:43	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		09/29/25 14:00	09/30/25 10:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	380		5.0	2.6	mg/L			09/29/25 18:47	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	380		5.0	2.6	mg/L			09/29/25 18:47	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			09/29/25 18:47	1
Total Dissolved Solids (SM 2540 C-2020)	7700		100	78	mg/L			09/29/25 15:37	1
Chloride (EPA 300.0)	4700		50	6.4	mg/L			10/02/25 01:52	50
Fluoride (EPA 300.0)	1.3		0.25	0.12	mg/L			10/02/25 01:43	5
Sulfate (EPA 300.0)	230		5.0	1.7	mg/L			10/02/25 01:43	5

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.562	U G	0.937	0.938	1.00	1.64	pCi/L	10/03/25 07:59	10/30/25 14:05	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*66.4*		*30 - 110*	*10/03/25 07:59*	*10/30/25 14:05*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	3.54	G	2.33	2.35	1.00	3.51	pCi/L	10/03/25 08:10	10/30/25 09:52	1

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-233999-1

Client Sample ID: 2019-06-F-20250923-01
Date Collected: 09/23/25 10:46
Date Received: 09/27/25 08:00

Lab Sample ID: 240-233999-1
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*66.4*		*30 - 110*	*10/03/25 08:10*	*10/30/25 09:52*	*1*
Y Carrier	*76.6*		*30 - 110*	*10/03/25 08:10*	*10/30/25 09:52*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**4.11**		2.51	2.53	5.00	3.51	pCi/L		10/30/25 17:10	1

Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-233999-1

Method: 9315 - Radium 226 by GFPC

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)
		Ba
Lab Sample ID	Client Sample ID	(30-110)
240-233999-1	2019-06-F-20250923-01	66.4
LCS 160-738969/2-A	Lab Control Sample	90.8
MB 160-738969/1-A	Method Blank	89.8

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	(30-110)	(30-110)
240-233999-1	2019-06-F-20250923-01	66.4	76.6
LCS 160-738970/2-A	Lab Control Sample	90.8	81.1
MB 160-738970/1-A	Method Blank	89.8	77.4

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-673738/1-A
Matrix: Water
Analysis Batch: 673881

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 673738

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		09/29/25 14:00	09/30/25 11:03	1

Lab Sample ID: LCS 240-673738/2-A
Matrix: Water
Analysis Batch: 673881

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 673738

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1000	1130		ug/L		113	80 - 120

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-673738/1-A
Matrix: Water
Analysis Batch: 674025

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 673738

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		09/29/25 14:00	09/30/25 17:25	1
Arsenic	ND		5.0	0.75	ug/L		09/29/25 14:00	09/30/25 17:25	1
Barium	ND		5.0	0.77	ug/L		09/29/25 14:00	09/30/25 17:25	1
Beryllium	ND		1.0	0.27	ug/L		09/29/25 14:00	09/30/25 17:25	1
Cadmium	ND		1.0	0.077	ug/L		09/29/25 14:00	09/30/25 17:25	1
Calcium	ND		1000	250	ug/L		09/29/25 14:00	09/30/25 17:25	1
Chromium	ND		5.0	1.2	ug/L		09/29/25 14:00	09/30/25 17:25	1
Cobalt	ND		1.0	0.086	ug/L		09/29/25 14:00	09/30/25 17:25	1
Lead	ND		1.0	0.45	ug/L		09/29/25 14:00	09/30/25 17:25	1
Lithium	ND		8.0	3.4	ug/L		09/29/25 14:00	09/30/25 17:25	1
Magnesium	ND		1000	61	ug/L		09/29/25 14:00	09/30/25 17:25	1
Molybdenum	ND		5.0	1.1	ug/L		09/29/25 14:00	09/30/25 17:25	1
Potassium	ND		1000	220	ug/L		09/29/25 14:00	09/30/25 17:25	1
Selenium	ND		5.0	0.89	ug/L		09/29/25 14:00	09/30/25 17:25	1
Sodium	ND		1000	880	ug/L		09/29/25 14:00	09/30/25 17:25	1
Thallium	ND		1.0	0.51	ug/L		09/29/25 14:00	09/30/25 17:25	1

Lab Sample ID: LCS 240-673738/3-A
Matrix: Water
Analysis Batch: 674025

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 673738

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	101		ug/L		101	80 - 120
Arsenic	1000	953		ug/L		95	80 - 120
Barium	1000	982		ug/L		98	80 - 120
Beryllium	500	462		ug/L		92	80 - 120
Cadmium	500	484		ug/L		97	80 - 120
Calcium	25000	24800		ug/L		99	80 - 120
Chromium	500	499		ug/L		100	80 - 120
Cobalt	500	509		ug/L		102	80 - 120
Lead	500	518		ug/L		104	80 - 120
Lithium	500	500		ug/L		100	80 - 120
Magnesium	25000	26300		ug/L		105	80 - 120

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

Lab Sample ID: LCS 240-673738/3-A
Matrix: Water
Analysis Batch: 674025

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 673738

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Molybdenum	500	493		ug/L		99	80 - 120
Potassium	25000	25600		ug/L		103	80 - 120
Selenium	1000	935		ug/L		94	80 - 120
Sodium	25000	25800		ug/L		103	80 - 120
Thallium	1000	1040		ug/L		104	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-673740/1-A
Matrix: Water
Analysis Batch: 673948

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 673740

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		09/29/25 14:00	09/30/25 10:01	1

Lab Sample ID: LCS 240-673740/2-A
Matrix: Water
Analysis Batch: 673948

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 673740

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	5.12		ug/L		102	80 - 120

Method: 2320 B-2021 - Alkalinity

Lab Sample ID: MB 240-673868/4
Matrix: Water
Analysis Batch: 673868

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	ND		5.0	2.6	mg/L			09/29/25 17:01	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			09/29/25 17:01	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			09/29/25 17:01	1

Lab Sample ID: LCS 240-673868/3
Matrix: Water
Analysis Batch: 673868

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	280	256		mg/L		92	86 - 123

Method: 2540 C-2020 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 240-673781/1
Matrix: Water
Analysis Batch: 673781

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	ND		10	7.8	mg/L			09/29/25 15:37	1

Method: 2540 C-2020 - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCS 240-673781/2
Matrix: Water
Analysis Batch: 673781

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	176	160		mg/L		91	80 - 120

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-674174/4
Matrix: Water
Analysis Batch: 674174

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.13	mg/L			10/01/25 23:24	1
Fluoride	ND		0.050	0.024	mg/L			10/01/25 23:24	1
Sulfate	ND		1.0	0.35	mg/L			10/01/25 23:24	1

Lab Sample ID: LCS 240-674174/5
Matrix: Water
Analysis Batch: 674174

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	49.6		mg/L		99	90 - 110
Fluoride	2.50	2.56		mg/L		102	90 - 110
Sulfate	50.0	50.5		mg/L		101	90 - 110

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-738969/1-A
Matrix: Water
Analysis Batch: 742990

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 738969

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.009226	U	0.227	0.227	1.00	0.446	pCi/L	10/03/25 07:59	10/30/25 14:03	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.8*		*30 - 110*	*10/03/25 07:59*	*10/30/25 14:03*	*1*

Lab Sample ID: LCS 160-738969/2-A
Matrix: Water
Analysis Batch: 742990

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 738969

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226	9.57	8.419		1.17	1.00	0.366	pCi/L	88	75 - 125

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*90.8*		*30 - 110*

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-233999-1

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-738970/1-A
Matrix: Water
Analysis Batch: 743002

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 738970

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.4017	U	0.335	0.337	1.00	0.521	pCi/L	10/03/25 08:10	10/30/25 09:52	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.8*		*30 - 110*	*10/03/25 08:10*	*10/30/25 09:52*	*1*
Y Carrier	*77.4*		*30 - 110*	*10/03/25 08:10*	*10/30/25 09:52*	*1*

Lab Sample ID: LCS 160-738970/2-A
Matrix: Water
Analysis Batch: 743002

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 738970

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228			7.97	8.382		1.19	1.00	0.541	pCi/L	105	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*90.8*		*30 - 110*
Y Carrier	*81.1*		*30 - 110*

Metals

Prep Batch: 673738

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233999-1	2019-06-F-20250923-01	Total Recoverable	Water	3005A	
MB 240-673738/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-673738/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-673738/3-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 673740

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233999-1	2019-06-F-20250923-01	Total/NA	Water	7470A	
MB 240-673740/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-673740/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 673881

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233999-1	2019-06-F-20250923-01	Total Recoverable	Water	6010D	673738
MB 240-673738/1-A	Method Blank	Total Recoverable	Water	6010D	673738
LCS 240-673738/2-A	Lab Control Sample	Total Recoverable	Water	6010D	673738

Analysis Batch: 673948

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233999-1	2019-06-F-20250923-01	Total/NA	Water	7470A	673740
MB 240-673740/1-A	Method Blank	Total/NA	Water	7470A	673740
LCS 240-673740/2-A	Lab Control Sample	Total/NA	Water	7470A	673740

Analysis Batch: 674025

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233999-1	2019-06-F-20250923-01	Total Recoverable	Water	6020B	673738
MB 240-673738/1-A	Method Blank	Total Recoverable	Water	6020B	673738
LCS 240-673738/3-A	Lab Control Sample	Total Recoverable	Water	6020B	673738

Analysis Batch: 674141

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233999-1	2019-06-F-20250923-01	Total Recoverable	Water	6020B	673738

General Chemistry

Analysis Batch: 673781

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233999-1	2019-06-F-20250923-01	Total/NA	Water	2540 C-2020	
MB 240-673781/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-673781/2	Lab Control Sample	Total/NA	Water	2540 C-2020	

Analysis Batch: 673868

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233999-1	2019-06-F-20250923-01	Total/NA	Water	2320 B-2021	
MB 240-673868/4	Method Blank	Total/NA	Water	2320 B-2021	
LCS 240-673868/3	Lab Control Sample	Total/NA	Water	2320 B-2021	

Analysis Batch: 674174

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233999-1	2019-06-F-20250923-01	Total/NA	Water	300.0	
240-233999-1	2019-06-F-20250923-01	Total/NA	Water	300.0	

General Chemistry (Continued)

Analysis Batch: 674174 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-674174/4	Method Blank	Total/NA	Water	300.0	
LCS 240-674174/5	Lab Control Sample	Total/NA	Water	300.0	

Rad

Prep Batch: 738969

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233999-1	2019-06-F-20250923-01	Total/NA	Water	PrecSep-21	
MB 160-738969/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-738969/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 738970

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-233999-1	2019-06-F-20250923-01	Total/NA	Water	PrecSep_0	
MB 160-738970/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-738970/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-233999-1
Project/Site: Federal CCR Wells

Client Sample ID: 2019-06-F-20250923-01
Lab Sample ID: 240-233999-1

Date Collected: 09/23/25 10:46
Matrix: Water
Date Received: 09/27/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			673738	F3PF	EET CLE	09/29/25 14:00
Total Recoverable	Analysis	6010D		1	673881	KLC	EET CLE	09/30/25 17:41
Total Recoverable	Prep	3005A			673738	F3PF	EET CLE	09/29/25 14:00
Total Recoverable	Analysis	6020B		10	674141	S4FJ	EET CLE	10/02/25 00:03
Total Recoverable	Prep	3005A			673738	F3PF	EET CLE	09/29/25 14:00
Total Recoverable	Analysis	6020B		1	674025	RKT	EET CLE	09/30/25 17:43
Total/NA	Prep	7470A			673740	F3PF	EET CLE	09/29/25 14:00
Total/NA	Analysis	7470A		1	673948	TQ6W	EET CLE	09/30/25 10:10
Total/NA	Analysis	2320 B-2021		1	673868	PQD2	EET CLE	09/29/25 18:47
Total/NA	Analysis	2540 C-2020		1	673781	C5SV	EET CLE	09/29/25 15:37
Total/NA	Analysis	300.0		5	674174	JMR	EET CLE	10/02/25 01:43
Total/NA	Analysis	300.0		50	674174	JMR	EET CLE	10/02/25 01:52
Total/NA	Prep	PrecSep-21			738969	JTR	EET SL	10/03/25 07:59
Total/NA	Analysis	9315		1	742990	SWS	EET SL	10/30/25 14:05
Total/NA	Prep	PrecSep_0			738970	JTR	EET SL	10/03/25 08:10
Total/NA	Analysis	9320		1	743002	SWS	EET SL	10/30/25 09:52
Total/NA	Analysis	Ra226_Ra228		1	743091	SCB	EET SL	10/30/25 17:10

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

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

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-233999-1
Project/Site: Federal CCR Wells

Laboratory: Eurofins Cleveland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0806	12-31-26
Georgia	State	4062	02-27-26
Illinois	NELAP	200004	08-31-26
Iowa	State	421	06-01-27
Kansas	NELAP	E-10336	01-31-26
Kentucky (UST)	State	112225	02-28-26
Kentucky (WW)	State	KY98016	12-31-25
Minnesota	NELAP	039-999-348	12-31-25
New Hampshire	NELAP	2250	09-30-26
New Jersey	NELAP	OH001	06-30-26
New York	NELAP	10975	04-01-26
North Dakota	State	R-244	02-27-26
Ohio	State	8303	10-28-25
Ohio VAP	State	ORELAP 4062	02-28-26
Oregon	NELAP	4062	10-15-25
Pennsylvania	NELAP	68-00340	08-31-26
Texas	NELAP	T104704517	08-31-26
US Fish & Wildlife	US Federal Programs	A26406	02-28-26
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	09-14-26
West Virginia DEP	State	210	12-31-25
Wisconsin	State	399167560	08-31-26

Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-27
ANAB	Dept. of Defense ELAP	L2305	04-06-27
ANAB	Dept. of Energy	L2305.01	04-06-27
ANAB	ISO/IEC 17025	L2305	04-06-27
Arizona	State	AZ0813	12-08-25
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	07-01-26
Connecticut	State	PH-0241	03-31-27
Florida	NELAP	E87689	06-30-26
HI - RadChem Recognition	State	n/a	06-30-26
Illinois	NELAP	200023	11-30-25
Iowa	State	373	12-01-26
Kansas	NELAP	E-10236	10-31-25
Kentucky (DW)	State	KY90125	12-31-25
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-25
Louisiana (All)	NELAP	106151	06-30-26
Louisiana (DW)	State	LA011	12-31-25
Maryland	State	310	10-01-26
Massachusetts	State	M-MO054	06-30-26
MI - RadChem Recognition	State	9005	06-30-26
Missouri	State	780	06-30-28
Nevada	State	MO00054	07-31-26

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-233999-1
Project/Site: Federal CCR Wells

Laboratory: Eurofins St. Louis (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New Jersey	NELAP	MO002	06-30-26
New Mexico	State	MO00054	06-30-26
New York	NELAP	11616	03-31-26
North Carolina (DW)	State	29700	06-30-26
North Dakota	State	R-207	06-30-25 *
Oklahoma	NELAP	9997	12-31-25
Oregon	NELAP	4157	09-01-26
Pennsylvania	NELAP	68-00540	02-28-26
South Carolina	State	85002	06-30-26
Texas	NELAP	T104704193	07-31-26
US Fish & Wildlife	US Federal Programs	058448	07-31-26
USDA	US Federal Programs	525-23-138-94730	05-18-26
Utah	NELAP	MO00054	07-31-26
Virginia	NELAP	460230	06-14-26
Washington	State	C592	08-31-26
West Virginia DEP	State	381	10-31-25

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

COLUMBUS 209

eurofins Environment

Client Information	Sampler: Bobby Gasto	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s):	COC No. 240-111832-39818.1
Client Contact: Taylor Huffman	Phone: 740-373-4308	E-Mail: roxanne.cisneros@et.eurofinsus.com	State of Origin:	Page: Page 1 of 8
Company: Lightstone Generation Gavin Power LLC	PWSID			Job #:
Address: 7397 OH-7	Due Date Requested:			
City: Cheshire	TAT Requested (days):			
State, Zip: OH, 45620	Compliance Project: Δ Yes Δ No			
Phone: 740-925-3171(Tel)	PO #: 2935505			
Email: taylor.huffman@lightstonegen.com	WO #:			
Project Name: Gavin CCR	Project #: 24019633			
Site:	SSOW#:			

Analysis Requested

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wastekil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B, 6020, 7470A	2540C_Calcd - TDS	9315_Ra226, 9320_Ra226Ra228, Ra226Ra228_GFPC	300.0_28D - Chloride, Fluoride & Sulfate	2320B - (MOD) Alkalinity	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	N	D	N	N		
2019-06-F-20250923-01	9-23-25	1046	G	Water			1	1	1	1	1	5	* Partial Ra Sample for 2019-06 ~520 mL *
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									

240-233999 COC

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
[signature]	9-25-25/0920	KEMRON	Ashley Miciuskey	9-26-25 1320	EUROFINS
Ashley Miciuskey	9-26-25 1700	EURO	J Collins	9-27-25 800	[signature]
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 06/08/2021

Eurofins – Cleveland Sample Receipt Form/Narrative Login # _____
Barberton Facility

Client Lighthouse Gavin Site Name _____ Cooler unpacked by: JC
Cooler Received on 9-27-25 Opened on 9-27-25
FedEx. 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other
Receipt After-hours Drop-off Date/Time Storage Location
Eurofins Cooler # EC 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 # 13 (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 1	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# HC567196
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

Labeled by:
Labels Verified 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 # _____

Eurofins - Cleveland Sample Receipt Multiple Cooler Form

Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
EC Client Box Other	IR GUN #: 13	1.5	1.7	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:	1.3	1.5	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:	0.6	0.8	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:	0.5	0.7	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:	0.8	1.0	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:	0.2	0.4	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:	1.2	1.4	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:	12.1	12.3	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:	1.3	1.5	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:	1.4	1.6	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:	0.9	1.1	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:	0.2	0.4	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
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EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
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EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None

☐ See Temperature Excursion Form

9/27/2025

Login Container Summary Report

240-233999

10/30/2025

Temperature readings _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
2019-06-F-20250923-01	240-233999-A-1	Plastic 60 mL - unpreserved				
2019-06-F 20250923-01	240-233999-B-1	Plastic 60 mL unpreserved				
2019-06-F-20250923-01	240-233999-C-1	Plastic 500ml - unpreserved				
2019-06-F-20250923-01	240-233999-D-1	Plastic 500ml - with Nitric Acid	<2			
2019-06-F-20250923-01	240-233999-E-1	Plastic 1 liter - Nitric Acid	<2			

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s): N/A	COC No: 240-208627.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: roxanne.cisneros@et.eurofinsus.com	State of Origin: Ohio	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): N/A		Job #: 240-233999-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 10/29/2025			
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Federal CCR Wells	Project #: 24019633			
Site: N/A	SSOW#: N/A			

Analysis Requested

Preservation Codes: -

Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9320_Ra228/PrecSep_0Radium-228 (GFPC)	9315_Ra226/PrecSep_21Radium-226 (GFPC)	Ra226Ra228_GFPCCombined Radium-226 and Radium-228	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
2019-06-F-20250923-01 (240-233999-1)	9/23/25	10:46 Eastern	G	Water			X	X	X	1	

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

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

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	KMartin	9/29/25 1460	EUC	Cheyenne Forrest	0830 SEP 30 2025	
	Relinquished by:	Date/Time:	Company	Received by: Cheyenne Forrest	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: 10/10/2024

Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-233999-1

Login Number: 233999
List Number: 2
Creator: Forrest, Cheyenne L

List Source: Eurofins St. Louis
List Creation: 09/30/25 12:48 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?	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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620
Generated 11/4/2025 10:24:20 AM

JOB DESCRIPTION

Federal CCR Wells

JOB NUMBER

240-234544-1

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization

Roxanne Cisneros

Generated
11/4/2025 10:24:20 AM

Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(330)497-9396

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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.
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
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

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

Job ID: 240-234544-1 — Eurofins Cleveland

Job Narrative
240-234544-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The samples were received on 10/4/2025 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 11 coolers at receipt time were 0.8°C, 0.9°C, 1.0°C, 1.1°C, 1.3°C, 1.5°C, 1.6°C, 1.6°C, 1.7°C, 1.9°C and 9.4°C.

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

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

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

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

Method Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-234544-1
Project/Site: Federal CCR Wells

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CLE
6020B	Metals (ICP/MS)	SW846	EET CLE
7470A	Mercury (CVAA)	SW846	EET CLE
2320 B-2021	Alkalinity	SM	EET CLE
2540 C-2020	Solids, Total Dissolved (TDS)	SM	EET CLE
300.0	Anions, Ion Chromatography	EPA	EET CLE
9315	Radium 226 by GFPC	SW846	EET SL
9320	Radium-228 (GFPC)	SW846	EET SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	EET SL
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CLE
7470A	Preparation, Mercury	SW846	EET CLE
PrecSep_0	Preparation, Precipitate Separation	None	EET SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	EET SL

Protocol References:

EPA = US Environmental Protection Agency

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:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

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

Sample Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-234544-1
Project/Site: Federal CCR Wells

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
240-234544-1	96152-F-20251002-01	Water	10/02/25 11:11	10/04/25 08:00	Ohio
240-234544-2	DUP-007-F-20251002-01	Water	10/02/25 00:00	10/04/25 08:00	Ohio

Detection Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-234544-1

Client Sample ID: 96152-F-20251002-01 — Lab Sample ID: 240-234544-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	450		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	8.4		5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	860		5.0	0.77	ug/L	1		6020B	Total Recoverable
Cadmium	0.089	J	1.0	0.077	ug/L	1		6020B	Total Recoverable
Calcium	49000		1000	250	ug/L	1		6020B	Total Recoverable
Chromium	7.6		5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	3.5		1.0	0.086	ug/L	1		6020B	Total Recoverable
Lead	2.1		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	86		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	16000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	4.6	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	8900		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	2300000		5000	4400	ug/L	5		6020B	Total Recoverable
Total Alkalinity	480		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	480		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	5800		50	39	mg/L	1		2540 C-2020	Total/NA
Chloride	3500		50	6.4	mg/L	50		300.0	Total/NA
Fluoride	0.91		0.25	0.12	mg/L	5		300.0	Total/NA
Sulfate	58		5.0	1.7	mg/L	5		300.0	Total/NA

Client Sample ID: DUP-007-F-20251002-01 — Lab Sample ID: 240-234544-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	450		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	8.5		5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	840		5.0	0.77	ug/L	1		6020B	Total Recoverable
Calcium	49000		1000	250	ug/L	1		6020B	Total Recoverable
Chromium	6.3		5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	3.4		1.0	0.086	ug/L	1		6020B	Total Recoverable
Lead	1.9		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	83		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	16000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	3.8	J	5.0	1.1	ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: DUP-007-F-20251002-01 (Continued)
Lab Sample ID: 240-234544-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	8800		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	2200000		5000	4400	ug/L	5		6020B	Total Recoverable
Total Alkalinity	480		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	480		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	5600		50	39	mg/L	1		2540 C-2020	Total/NA
Chloride	3500		50	6.4	mg/L	50		300.0	Total/NA
Fluoride	0.94	F2	0.25	0.12	mg/L	5		300.0	Total/NA
Sulfate	59	F2 F1	5.0	1.7	mg/L	5		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 96152-F-20251002-01
Date Collected: 10/02/25 11:11
Date Received: 10/04/25 08:00

Lab Sample ID: 240-234544-1
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**450**		100	57	ug/L		10/06/25 14:00	10/07/25 13:41	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		10/06/25 14:00	10/07/25 15:53	1
Arsenic	**8.4**		5.0	0.75	ug/L		10/06/25 14:00	10/07/25 15:53	1
Barium	**860**		5.0	0.77	ug/L		10/06/25 14:00	10/07/25 15:53	1
Beryllium	ND		1.0	0.27	ug/L		10/06/25 14:00	10/07/25 15:53	1
Cadmium	**0.089**	**J**	1.0	0.077	ug/L		10/06/25 14:00	10/07/25 15:53	1
Calcium	**49000**		1000	250	ug/L		10/06/25 14:00	10/07/25 15:53	1
Chromium	**7.6**		5.0	1.2	ug/L		10/06/25 14:00	10/07/25 15:53	1
Cobalt	**3.5**		1.0	0.086	ug/L		10/06/25 14:00	10/07/25 15:53	1
Lead	**2.1**		1.0	0.45	ug/L		10/06/25 14:00	10/07/25 15:53	1
Lithium	**86**		8.0	3.4	ug/L		10/06/25 14:00	10/07/25 15:53	1
Magnesium	**16000**		1000	61	ug/L		10/06/25 14:00	10/07/25 15:53	1
Molybdenum	**4.6**	**J**	5.0	1.1	ug/L		10/06/25 14:00	10/07/25 15:53	1
Potassium	**8900**		1000	220	ug/L		10/06/25 14:00	10/07/25 15:53	1
Selenium	ND		5.0	0.89	ug/L		10/06/25 14:00	10/07/25 15:53	1
Sodium	**2300000**		5000	4400	ug/L		10/06/25 14:00	10/08/25 10:19	5
Thallium	ND		1.0	0.51	ug/L		10/06/25 14:00	10/07/25 15:53	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		10/06/25 14:00	10/07/25 10:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	**480**		5.0	2.6	mg/L			10/09/25 00:47	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**480**		5.0	2.6	mg/L			10/09/25 00:47	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			10/09/25 00:47	1
Total Dissolved Solids (SM 2540 C-2020)	**5800**		50	39	mg/L			10/08/25 11:24	1
Chloride (EPA 300.0)	**3500**		50	6.4	mg/L			10/07/25 09:36	50
Fluoride (EPA 300.0)	**0.91**		0.25	0.12	mg/L			10/07/25 09:27	5
Sulfate (EPA 300.0)	**58**		5.0	1.7	mg/L			10/07/25 09:27	5

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**1.54**		0.443	0.464	1.00	0.294	pCi/L	10/09/25 07:50	11/03/25 17:59	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.6*		*30 - 110*	*10/09/25 07:50*	*11/03/25 17:59*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**2.42**		0.670	0.706	1.00	0.762	pCi/L	10/09/25 07:54	11/03/25 11:58	1

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-234544-1

Client Sample ID: 96152-F-20251002-01
Date Collected: 10/02/25 11:11
Date Received: 10/04/25 08:00

Lab Sample ID: 240-234544-1
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.6*		*30 - 110*	*10/09/25 07:54*	*11/03/25 11:58*	*1*
Y Carrier	*84.1*		*30 - 110*	*10/09/25 07:54*	*11/03/25 11:58*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**3.96**		0.803	0.845	5.00	0.762	pCi/L		11/03/25 12:34	1

Client Sample ID: DUP-007-F-20251002-01

Date Collected: 10/02/25 00:00
Date Received: 10/04/25 08:00

Lab Sample ID: 240-234544-2

Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**450**		100	57	ug/L		10/06/25 14:00	10/07/25 14:03	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		10/06/25 14:00	10/07/25 16:19	1
Arsenic	**8.5**		5.0	0.75	ug/L		10/06/25 14:00	10/07/25 16:19	1
Barium	**840**		5.0	0.77	ug/L		10/06/25 14:00	10/07/25 16:19	1
Beryllium	ND		1.0	0.27	ug/L		10/06/25 14:00	10/07/25 16:19	1
Cadmium	ND		1.0	0.077	ug/L		10/06/25 14:00	10/07/25 16:19	1
Calcium	**49000**		1000	250	ug/L		10/06/25 14:00	10/07/25 16:19	1
Chromium	**6.3**		5.0	1.2	ug/L		10/06/25 14:00	10/07/25 16:19	1
Cobalt	**3.4**		1.0	0.086	ug/L		10/06/25 14:00	10/07/25 16:19	1
Lead	**1.9**		1.0	0.45	ug/L		10/06/25 14:00	10/07/25 16:19	1
Lithium	**83**		8.0	3.4	ug/L		10/06/25 14:00	10/07/25 16:19	1
Magnesium	**16000**		1000	61	ug/L		10/06/25 14:00	10/07/25 16:19	1
Molybdenum	**3.8**	**J**	5.0	1.1	ug/L		10/06/25 14:00	10/07/25 16:19	1
Potassium	**8800**		1000	220	ug/L		10/06/25 14:00	10/07/25 16:19	1
Selenium	ND		5.0	0.89	ug/L		10/06/25 14:00	10/07/25 16:19	1
Sodium	**2200000**		5000	4400	ug/L		10/06/25 14:00	10/08/25 10:29	5
Thallium	ND		1.0	0.51	ug/L		10/06/25 14:00	10/07/25 16:19	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		10/06/25 14:00	10/07/25 11:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	**480**		5.0	2.6	mg/L			10/08/25 23:48	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**480**		5.0	2.6	mg/L			10/08/25 23:48	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			10/08/25 23:48	1
Total Dissolved Solids (SM 2540 C-2020)	**5600**		50	39	mg/L			10/08/25 11:24	1
Chloride (EPA 300.0)	**3500**		50	6.4	mg/L			10/07/25 10:29	50
Fluoride (EPA 300.0)	**0.94**	**F2**	0.25	0.12	mg/L			10/07/25 10:03	5
Sulfate (EPA 300.0)	**59**	**F2 F1**	5.0	1.7	mg/L			10/07/25 10:03	5

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**1.80**		0.504	0.530	1.00	0.436	pCi/L	10/09/25 07:50	11/03/25 17:59	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.3*		*30 - 110*	*10/09/25 07:50*	*11/03/25 17:59*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**2.13**		0.596	0.628	1.00	0.624	pCi/L	10/09/25 07:54	11/03/25 11:58	1

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-234544-1

Client Sample ID: DUP-007-F-20251002-01
Date Collected: 10/02/25 00:00
Date Received: 10/04/25 08:00

Lab Sample ID: 240-234544-2
Matrix: Water

Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	89.3		30 - 110	10/09/25 07:54	11/03/25 11:58	1
Y Carrier	83.7		30 - 110	10/09/25 07:54	11/03/25 11:58	1

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	3.93		0.781	0.822	5.00	0.624	pCi/L		11/04/25 09:15	1

Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-234544-1

Method: 9315 - Radium 226 by GFPC

Matrix: Water **Prep Type: Total/NA**

		Percent Yield (Acceptance Limits)							
		Ba							
Lab Sample ID	Client Sample ID	(30-110)							
240-234544-1	96152-F-20251002-01	89.6							
240-234544-2	DUP-007-F-20251002-01	89.3							
LCS 160-739901/2-A	Lab Control Sample	86.3							
MB 160-739901/1-A	Method Blank	84.1							

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	(30-110)	(30-110)						
240-234544-1	96152-F-20251002-01	89.6	84.1						
240-234544-2	DUP-007-F-20251002-01	89.3	83.7						
LCS 160-739902/2-A	Lab Control Sample	86.3	82.6						
MB 160-739902/1-A	Method Blank	84.1	81.1						

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-674729/1-A
Matrix: Water
Analysis Batch: 674891

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 674729

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		10/06/25 14:00	10/07/25 13:33	1

Lab Sample ID: LCS 240-674729/2-A
Matrix: Water
Analysis Batch: 674891

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 674729

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Boron			1000	1040		ug/L		104	80 - 120		

Lab Sample ID: 240-234544-1 MS
Matrix: Water
Analysis Batch: 674891

Client Sample ID: 96152-F-20251002-01
Prep Type: Total Recoverable
Prep Batch: 674729

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Boron	450		1000	1480		ug/L		104	75 - 125		

Lab Sample ID: 240-234544-1 MSD
Matrix: Water
Analysis Batch: 674891

Client Sample ID: 96152-F-20251002-01
Prep Type: Total Recoverable
Prep Batch: 674729

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Boron	450		1000	1550		ug/L		110	75 - 125	4	20

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-674729/1-A
Matrix: Water
Analysis Batch: 674899

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 674729

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		10/06/25 14:00	10/07/25 15:48	1
Arsenic	ND		5.0	0.75	ug/L		10/06/25 14:00	10/07/25 15:48	1
Barium	ND		5.0	0.77	ug/L		10/06/25 14:00	10/07/25 15:48	1
Beryllium	ND		1.0	0.27	ug/L		10/06/25 14:00	10/07/25 15:48	1
Cadmium	ND		1.0	0.077	ug/L		10/06/25 14:00	10/07/25 15:48	1
Calcium	ND		1000	250	ug/L		10/06/25 14:00	10/07/25 15:48	1
Chromium	ND		5.0	1.2	ug/L		10/06/25 14:00	10/07/25 15:48	1
Cobalt	ND		1.0	0.086	ug/L		10/06/25 14:00	10/07/25 15:48	1
Lead	ND		1.0	0.45	ug/L		10/06/25 14:00	10/07/25 15:48	1
Lithium	ND		8.0	3.4	ug/L		10/06/25 14:00	10/07/25 15:48	1
Magnesium	ND		1000	61	ug/L		10/06/25 14:00	10/07/25 15:48	1
Molybdenum	ND		5.0	1.1	ug/L		10/06/25 14:00	10/07/25 15:48	1
Potassium	ND		1000	220	ug/L		10/06/25 14:00	10/07/25 15:48	1
Selenium	ND		5.0	0.89	ug/L		10/06/25 14:00	10/07/25 15:48	1
Sodium	ND		1000	880	ug/L		10/06/25 14:00	10/07/25 15:48	1
Thallium	ND		1.0	0.51	ug/L		10/06/25 14:00	10/07/25 15:48	1

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

Lab Sample ID: LCS 240-674729/3-A
Matrix: Water
Analysis Batch: 674899

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 674729

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	97.5		ug/L		98	80 - 120
Arsenic	1000	977		ug/L		98	80 - 120
Barium	1000	967		ug/L		97	80 - 120
Beryllium	500	472		ug/L		94	80 - 120
Cadmium	500	466		ug/L		93	80 - 120
Calcium	25000	25200		ug/L		101	80 - 120
Chromium	500	495		ug/L		99	80 - 120
Cobalt	500	482		ug/L		96	80 - 120
Lead	500	494		ug/L		99	80 - 120
Lithium	500	505		ug/L		101	80 - 120
Magnesium	25000	25500		ug/L		102	80 - 120
Molybdenum	500	485		ug/L		97	80 - 120
Potassium	25000	25300		ug/L		101	80 - 120
Selenium	1000	933		ug/L		93	80 - 120
Sodium	25000	25000		ug/L		100	80 - 120
Thallium	1000	994		ug/L		99	80 - 120

Lab Sample ID: 240-234544-1 MS
Matrix: Water
Analysis Batch: 674899

Client Sample ID: 96152-F-20251002-01
Prep Type: Total Recoverable
Prep Batch: 674729

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	ND		100	97.3		ug/L		97	80 - 120
Arsenic	8.4		1000	1050		ug/L		105	80 - 120
Barium	860		1000	1810		ug/L		95	80 - 120
Beryllium	ND		500	455		ug/L		91	80 - 120
Cadmium	0.089	J	500	438		ug/L		87	80 - 120
Calcium	49000		25000	73500		ug/L		98	80 - 120
Chromium	7.6		500	471		ug/L		93	80 - 120
Cobalt	3.5		500	504		ug/L		100	80 - 120
Lead	2.1		500	458		ug/L		91	80 - 120
Lithium	86		500	588		ug/L		100	80 - 120
Magnesium	16000		25000	40000		ug/L		95	80 - 120
Molybdenum	4.6	J	500	516		ug/L		102	80 - 120
Potassium	8900		25000	33300		ug/L		98	80 - 120
Selenium	ND		1000	884		ug/L		88	80 - 120
Thallium	ND		1000	910		ug/L		91	80 - 120

Lab Sample ID: 240-234544-1 MS
Matrix: Water
Analysis Batch: 675109

Client Sample ID: 96152-F-20251002-01
Prep Type: Total Recoverable
Prep Batch: 674729

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sodium	2300000		25000	2270000	4	ug/L		76	80 - 120

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

Lab Sample ID: 240-234544-1 MSD
Matrix: Water
Analysis Batch: 674899

Client Sample ID: 96152-F-20251002-01
Prep Type: Total Recoverable
Prep Batch: 674729

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	ND		100	95.8		ug/L		96	80 - 120	2	20
Arsenic	8.4		1000	1040		ug/L		103	80 - 120	1	20
Barium	860		1000	1760		ug/L		91	80 - 120	2	20
Beryllium	ND		500	453		ug/L		91	80 - 120	0	20
Cadmium	0.089	J	500	430		ug/L		86	80 - 120	2	20
Calcium	49000		25000	72100		ug/L		92	80 - 120	2	20
Chromium	7.6		500	465		ug/L		91	80 - 120	1	20
Cobalt	3.5		500	498		ug/L		99	80 - 120	1	20
Lead	2.1		500	452		ug/L		90	80 - 120	1	20
Lithium	86		500	582		ug/L		99	80 - 120	1	20
Magnesium	16000		25000	39300		ug/L		92	80 - 120	2	20
Molybdenum	4.6	J	500	506		ug/L		100	80 - 120	2	20
Potassium	8900		25000	33100		ug/L		97	80 - 120	1	20
Selenium	ND		1000	880		ug/L		88	80 - 120	0	20
Thallium	ND		1000	906		ug/L		91	80 - 120	0	20

Lab Sample ID: 240-234544-1 MSD
Matrix: Water
Analysis Batch: 675109

Client Sample ID: 96152-F-20251002-01
Prep Type: Total Recoverable
Prep Batch: 674729

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sodium	2300000		25000	2180000	4	ug/L		-309	80 - 120	4	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-674731/1-A
Matrix: Water
Analysis Batch: 674938

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 674731

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		10/06/25 14:00	10/07/25 10:51	1

Lab Sample ID: LCS 240-674731/2-A
Matrix: Water
Analysis Batch: 674938

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 674731

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	4.76		ug/L		95	80 - 120

Lab Sample ID: 240-234544-1 MS
Matrix: Water
Analysis Batch: 674938

Client Sample ID: 96152-F-20251002-01
Prep Type: Total/NA
Prep Batch: 674731

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		1.00	1.06		ug/L		106	80 - 120

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: 240-234544-1 MSD
Matrix: Water
Analysis Batch: 674938

Client Sample ID: 96152-F-20251002-01
Prep Type: Total/NA
Prep Batch: 674731

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		1.00	1.17		ug/L		117	80 - 120	9	20

Method: 2320 B-2021 - Alkalinity

Lab Sample ID: MB 240-675289/33
Matrix: Water
Analysis Batch: 675289

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	ND		5.0	2.6	mg/L			10/08/25 23:00	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			10/08/25 23:00	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			10/08/25 23:00	1

Lab Sample ID: MB 240-675289/4
Matrix: Water
Analysis Batch: 675289

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	ND		5.0	2.6	mg/L			10/08/25 18:24	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			10/08/25 18:24	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			10/08/25 18:24	1

Lab Sample ID: LCS 240-675289/32
Matrix: Water
Analysis Batch: 675289

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	280	260		mg/L		93	85 - 115

Method: 2540 C-2020 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 240-675110/1
Matrix: Water
Analysis Batch: 675110

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	ND		10	7.8	mg/L			10/08/25 11:24	1

Lab Sample ID: LCS 240-675110/2
Matrix: Water
Analysis Batch: 675110

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	495	571		mg/L		115	80 - 120

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-674795/3
Matrix: Water
Analysis Batch: 674795

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.13	mg/L			10/07/25 06:34	1
Fluoride	ND		0.050	0.024	mg/L			10/07/25 06:34	1
Sulfate	ND		1.0	0.35	mg/L			10/07/25 06:34	1

Lab Sample ID: LCS 240-674795/4
Matrix: Water
Analysis Batch: 674795

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			50.0	50.4		mg/L		101	90 - 110		
Fluoride			2.50	2.58		mg/L		103	90 - 110		
Sulfate			50.0	53.6		mg/L		107	90 - 110		

Lab Sample ID: 240-234544-2 MS
Matrix: Water
Analysis Batch: 674795

Client Sample ID: DUP-007-F-20251002-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Fluoride	0.94	F2	12.5	12.0		mg/L		89	80 - 120		
Sulfate	59	F2 F1	250	304		mg/L		98	80 - 120		

Lab Sample ID: 240-234544-2 MS
Matrix: Water
Analysis Batch: 674795

Client Sample ID: DUP-007-F-20251002-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	3500		2500	5910		mg/L		98	80 - 120		
Fluoride	1.2	J	125	133		mg/L		105	80 - 120		
Sulfate	68		2500	2910		mg/L		114	80 - 120		

Lab Sample ID: 240-234544-2 MSD
Matrix: Water
Analysis Batch: 674795

Client Sample ID: DUP-007-F-20251002-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluoride	0.94	F2	12.5	15.5	F2	mg/L		116	80 - 120	25	15
Sulfate	59	F2 F1	250	379	F1 F2	mg/L		128	80 - 120	22	15

Lab Sample ID: 240-234544-2 MSD
Matrix: Water
Analysis Batch: 674795

Client Sample ID: DUP-007-F-20251002-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	3500		2500	5770		mg/L		92	80 - 120	2	15
Fluoride	1.2	J	125	130		mg/L		103	80 - 120	2	15
Sulfate	68		2500	2840		mg/L		111	80 - 120	3	15

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-739901/1-A
Matrix: Water
Analysis Batch: 743502

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 739901

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.2867	U	0.233	0.234	1.00	0.341	pCi/L	10/09/25 07:50	11/03/25 15:51	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.1*		*30 - 110*	*10/09/25 07:50*	*11/03/25 15:51*	*1*

Lab Sample ID: LCS 160-739901/2-A
Matrix: Water
Analysis Batch: 743502

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 739901

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-226			9.57	9.818		1.31	1.00	0.313	pCi/L	103	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*86.3*		*30 - 110*

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-739902/1-A
Matrix: Water
Analysis Batch: 743503

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 739902

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.5851	U	0.394	0.397	1.00	0.589	pCi/L	10/09/25 07:54	11/03/25 11:58	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.1*		*30 - 110*	*10/09/25 07:54*	*11/03/25 11:58*	*1*
Y Carrier	*81.1*		*30 - 110*	*10/09/25 07:54*	*11/03/25 11:58*	*1*

Lab Sample ID: LCS 160-739902/2-A
Matrix: Water
Analysis Batch: 743503

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 739902

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228			7.96	9.372		1.30	1.00	0.548	pCi/L	118	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*86.3*		*30 - 110*
Y Carrier	*82.6*		*30 - 110*

Metals

Prep Batch: 674729

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-234544-1	96152-F-20251002-01	Total Recoverable	Water	3005A	
240-234544-2	DUP-007-F-20251002-01	Total Recoverable	Water	3005A	
MB 240-674729/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-674729/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-674729/3-A	Lab Control Sample	Total Recoverable	Water	3005A	
240-234544-1 MS	96152-F-20251002-01	Total Recoverable	Water	3005A	
240-234544-1 MS	96152-F-20251002-01	Total Recoverable	Water	3005A	
240-234544-1 MSD	96152-F-20251002-01	Total Recoverable	Water	3005A	
240-234544-1 MSD	96152-F-20251002-01	Total Recoverable	Water	3005A	

Prep Batch: 674731

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-234544-1	96152-F-20251002-01	Total/NA	Water	7470A	
240-234544-2	DUP-007-F-20251002-01	Total/NA	Water	7470A	
MB 240-674731/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-674731/2-A	Lab Control Sample	Total/NA	Water	7470A	
240-234544-1 MS	96152-F-20251002-01	Total/NA	Water	7470A	
240-234544-1 MSD	96152-F-20251002-01	Total/NA	Water	7470A	

Analysis Batch: 674891

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-234544-1	96152-F-20251002-01	Total Recoverable	Water	6010D	674729
240-234544-2	DUP-007-F-20251002-01	Total Recoverable	Water	6010D	674729
MB 240-674729/1-A	Method Blank	Total Recoverable	Water	6010D	674729
LCS 240-674729/2-A	Lab Control Sample	Total Recoverable	Water	6010D	674729
240-234544-1 MS	96152-F-20251002-01	Total Recoverable	Water	6010D	674729
240-234544-1 MSD	96152-F-20251002-01	Total Recoverable	Water	6010D	674729

Analysis Batch: 674899

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-234544-1	96152-F-20251002-01	Total Recoverable	Water	6020B	674729
240-234544-2	DUP-007-F-20251002-01	Total Recoverable	Water	6020B	674729
MB 240-674729/1-A	Method Blank	Total Recoverable	Water	6020B	674729
LCS 240-674729/3-A	Lab Control Sample	Total Recoverable	Water	6020B	674729
240-234544-1 MS	96152-F-20251002-01	Total Recoverable	Water	6020B	674729
240-234544-1 MSD	96152-F-20251002-01	Total Recoverable	Water	6020B	674729

Analysis Batch: 674938

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-234544-1	96152-F-20251002-01	Total/NA	Water	7470A	674731
240-234544-2	DUP-007-F-20251002-01	Total/NA	Water	7470A	674731
MB 240-674731/1-A	Method Blank	Total/NA	Water	7470A	674731
LCS 240-674731/2-A	Lab Control Sample	Total/NA	Water	7470A	674731
240-234544-1 MS	96152-F-20251002-01	Total/NA	Water	7470A	674731
240-234544-1 MSD	96152-F-20251002-01	Total/NA	Water	7470A	674731

Analysis Batch: 675109

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-234544-1	96152-F-20251002-01	Total Recoverable	Water	6020B	674729
240-234544-2	DUP-007-F-20251002-01	Total Recoverable	Water	6020B	674729
240-234544-1 MS	96152-F-20251002-01	Total Recoverable	Water	6020B	674729

Metals (Continued)

Analysis Batch: 675109 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-234544-1 MSD	96152-F-20251002-01	Total Recoverable	Water	6020B	674729

General Chemistry

Analysis Batch: 674795

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-234544-1	96152-F-20251002-01	Total/NA	Water	300.0	
240-234544-1	96152-F-20251002-01	Total/NA	Water	300.0	
240-234544-2	DUP-007-F-20251002-01	Total/NA	Water	300.0	
240-234544-2	DUP-007-F-20251002-01	Total/NA	Water	300.0	
MB 240-674795/3	Method Blank	Total/NA	Water	300.0	
LCS 240-674795/4	Lab Control Sample	Total/NA	Water	300.0	
240-234544-2 MS	DUP-007-F-20251002-01	Total/NA	Water	300.0	
240-234544-2 MS	DUP-007-F-20251002-01	Total/NA	Water	300.0	
240-234544-2 MSD	DUP-007-F-20251002-01	Total/NA	Water	300.0	
240-234544-2 MSD	DUP-007-F-20251002-01	Total/NA	Water	300.0	

Analysis Batch: 675110

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-234544-1	96152-F-20251002-01	Total/NA	Water	2540 C-2020	
240-234544-2	DUP-007-F-20251002-01	Total/NA	Water	2540 C-2020	
MB 240-675110/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-675110/2	Lab Control Sample	Total/NA	Water	2540 C-2020	

Analysis Batch: 675289

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-234544-1	96152-F-20251002-01	Total/NA	Water	2320 B-2021	
240-234544-2	DUP-007-F-20251002-01	Total/NA	Water	2320 B-2021	
MB 240-675289/33	Method Blank	Total/NA	Water	2320 B-2021	
MB 240-675289/4	Method Blank	Total/NA	Water	2320 B-2021	
LCS 240-675289/32	Lab Control Sample	Total/NA	Water	2320 B-2021	

Rad

Prep Batch: 739901

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-234544-1	96152-F-20251002-01	Total/NA	Water	PrecSep-21	
240-234544-2	DUP-007-F-20251002-01	Total/NA	Water	PrecSep-21	
MB 160-739901/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-739901/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 739902

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-234544-1	96152-F-20251002-01	Total/NA	Water	PrecSep_0	
240-234544-2	DUP-007-F-20251002-01	Total/NA	Water	PrecSep_0	
MB 160-739902/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-739902/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-234544-1

Client Sample ID: 96152-F-20251002-01

Lab Sample ID: 240-234544-1

Date Collected: 10/02/25 11:11
Matrix: Water
Date Received: 10/04/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			674729	F3PF	EET CLE	10/06/25 14:00
Total Recoverable	Analysis	6010D		1	674891	RKT	EET CLE	10/07/25 13:41
Total Recoverable	Prep	3005A			674729	F3PF	EET CLE	10/06/25 14:00
Total Recoverable	Analysis	6020B		1	674899	S4FJ	EET CLE	10/07/25 15:53
Total Recoverable	Prep	3005A			674729	F3PF	EET CLE	10/06/25 14:00
Total Recoverable	Analysis	6020B		5	675109	S4FJ	EET CLE	10/08/25 10:19
Total/NA	Prep	7470A			674731	F3PF	EET CLE	10/06/25 14:00
Total/NA	Analysis	7470A		1	674938	TQ6W	EET CLE	10/07/25 10:54
Total/NA	Analysis	2320 B-2021		1	675289	PQD2	EET CLE	10/09/25 00:47
Total/NA	Analysis	2540 C-2020		1	675110	AAP	EET CLE	10/08/25 11:24
Total/NA	Analysis	300.0		5	674795	JMR	EET CLE	10/07/25 09:27
Total/NA	Analysis	300.0		50	674795	JMR	EET CLE	10/07/25 09:36
Total/NA	Prep	PrecSep-21			739901	AMS	EET SL	10/09/25 07:50
Total/NA	Analysis	9315		1	743504	SWS	EET SL	11/03/25 17:59
Total/NA	Prep	PrecSep_0			739902	AMS	EET SL	10/09/25 07:54
Total/NA	Analysis	9320		1	743504	SWS	EET SL	11/03/25 11:58
Total/NA	Analysis	Ra226_Ra228		1	743511	SCB	EET SL	11/03/25 12:34

Client Sample ID: DUP-007-F-20251002-01

Lab Sample ID: 240-234544-2

Date Collected: 10/02/25 00:00
Matrix: Water
Date Received: 10/04/25 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			674729	F3PF	EET CLE	10/06/25 14:00
Total Recoverable	Analysis	6010D		1	674891	RKT	EET CLE	10/07/25 14:03
Total Recoverable	Prep	3005A			674729	F3PF	EET CLE	10/06/25 14:00
Total Recoverable	Analysis	6020B		1	674899	S4FJ	EET CLE	10/07/25 16:19
Total Recoverable	Prep	3005A			674729	F3PF	EET CLE	10/06/25 14:00
Total Recoverable	Analysis	6020B		5	675109	S4FJ	EET CLE	10/08/25 10:29
Total/NA	Prep	7470A			674731	F3PF	EET CLE	10/06/25 14:00
Total/NA	Analysis	7470A		1	674938	TQ6W	EET CLE	10/07/25 11:08
Total/NA	Analysis	2320 B-2021		1	675289	PQD2	EET CLE	10/08/25 23:48
Total/NA	Analysis	2540 C-2020		1	675110	AAP	EET CLE	10/08/25 11:24
Total/NA	Analysis	300.0		5	674795	JMR	EET CLE	10/07/25 10:03
Total/NA	Analysis	300.0		50	674795	JMR	EET CLE	10/07/25 10:29
Total/NA	Prep	PrecSep-21			739901	AMS	EET SL	10/09/25 07:50
Total/NA	Analysis	9315		1	743504	SWS	EET SL	11/03/25 17:59
Total/NA	Prep	PrecSep_0			739902	AMS	EET SL	10/09/25 07:54
Total/NA	Analysis	9320		1	743504	SWS	EET SL	11/03/25 11:58
Total/NA	Analysis	Ra226_Ra228		1	743511	SCB	EET SL	11/04/25 09:15

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

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

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-234544-1
Project/Site: Federal CCR Wells

Laboratory: Eurofins Cleveland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0806	12-31-26
Georgia	State	4062	02-27-26
Illinois	NELAP	200004	08-31-26
Iowa	State	421	06-01-27
Kansas	NELAP	E-10336	01-31-26
Kentucky (UST)	State	112225	02-28-26
Kentucky (WW)	State	KY98016	12-31-25
Minnesota	NELAP	039-999-348	12-31-25
New Hampshire	NELAP	2250	09-30-26
New Jersey	NELAP	OH001	06-30-26
New York	NELAP	10975	04-01-26
North Dakota	State	R-244	02-27-26
Ohio	State	8303	10-28-25
Ohio VAP	State	ORELAP 4062	02-28-26
Oregon	NELAP	4062	10-15-25
Pennsylvania	NELAP	68-00340	08-31-26
Texas	NELAP	T104704517	08-31-26
US Fish & Wildlife	US Federal Programs	A26406	02-28-26
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	09-14-26
West Virginia DEP	State	210	12-31-25
Wisconsin	State	399167560	08-31-26

Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-27
ANAB	Dept. of Defense ELAP	L2305	04-06-27
ANAB	Dept. of Energy	L2305.01	04-06-27
ANAB	ISO/IEC 17025	L2305	04-06-27
Arizona	State	AZ0813	12-08-25
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	07-01-26
Connecticut	State	PH-0241	03-31-27
Florida	NELAP	E87689	06-30-26
HI - RadChem Recognition	State	n/a	06-30-26
Illinois	NELAP	200023	11-30-25
Iowa	State	373	12-01-26
Kansas	NELAP	E-10236	10-31-25 *
Kentucky (DW)	State	KY90125	12-31-25
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-25
Louisiana (All)	NELAP	106151	06-30-26
Louisiana (DW)	State	LA011	12-31-25
Maryland	State	310	10-01-26
Massachusetts	State	M-MO054	06-30-26
MI - RadChem Recognition	State	9005	06-30-26
Missouri	State	780	06-30-28
Nevada	State	MO00054	07-31-26

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-234544-1
Project/Site: Federal CCR Wells

Laboratory: Eurofins St. Louis (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New Jersey	NELAP	MO002	06-30-26
New Mexico	State	MO00054	06-30-26
New York	NELAP	11616	03-31-26
North Carolina (DW)	State	29700	06-30-26
North Dakota	State	R-207	06-30-25 *
Oklahoma	NELAP	9997	12-31-25
Oregon	NELAP	4157	09-01-26
Pennsylvania	NELAP	68-00540	02-28-26
South Carolina	State	85002	06-30-26
Texas	NELAP	T104704193	07-31-26
US Fish & Wildlife	US Federal Programs	058448	07-31-26
USDA	US Federal Programs	525-23-138-94730	05-18-26
Utah	NELAP	MO00054	07-31-26
Virginia	NELAP	460230	06-14-26
Washington	State	C592	08-31-26
West Virginia DEP	State	381	11-30-26

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

COLUMBUS
209

eurofins
Environment Testing

Client Information	Sampler: Bobby Gsto	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s):	COC No.: 240-111832-39818.1
Client Contact: Taylor Huffman	Phone: 740-373-4308	E-Mail: roxanne.cisneros@et.eurofinsus.com	State of Origin:	Page: Page 1 of 8
Company: Lightstone Generation Gavin Power LLC	PWSID	Analysis Requested		Job #:
Address: 7397 OH-7	Due Date Requested:			
City: Cheshire	TAT Requested (days):			
State, Zip: OH, 45620	Compliance Project: Δ Yes Δ No			
Phone: 740-925-3171(Tel)	PO #: 2935505			
Email: taylor.huffman@lightstonegen.com	WO #:			
Project Name: Gavin CCR	Project #: 24019633			
Site: Gavin	SSOW#:			

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wastestl, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B, 6020, 7470A	2540C_Calcd - TDS	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	300.0_28D - Chloride, Fluoride & Sulfate	2320B - (MOD) Alkalinity	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	N	D	N	N		
96152-F-20251002-01	10-2-25	1111	G	Water			1	1	2	1	1		
DUP-007-F-20251002-01	10-2-25	—	G	Water			1	1	2	1	1		
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									

240-234544 COC

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
[signature]	10-3-25 / 0845	KEMRON	Ashley McCloskey	10-3-25 1308	EUR
Relinquished by: Ashley McCloskey	Date/Time: 10-3-25 1700	Company EUR	Received by: Collins	Date/Time: 10-4-25 800	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: 06/08/2021

Eurofins – Cleveland Sample Receipt Form/Narrative Login # _____
Barberton Facility

Client Gavin Site Name _____ Cooler unpacked by: JC

Cooler Received on 10-4-25 Opened on 10-4-25

FedEx. 1st Grd Exp UPS FAS (Waypoint) Client Drop Off Eurofins Courier Other

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

Eurofins Cooler # (OC) 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 # 13 (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 1	(Yes) No	**Tests that are not checked for pH by Receiving** **VOAs** **Oil and Grease** **TOC**
-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)?	(Y) (Y) (Y)	
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# HC567196
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)	

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

Concerning _____

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

Labeled by:

Labels Verified 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 # _____

Eurofins - Cleveland Sample Receipt Multiple Cooler Form

Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
(EC) Client Box Other	IR GUN #: 13	1.5	1.7	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #:	9.2	9.4	Wet Ice Blue Ice Dry Ice Water (None)
(EC) Client Box Other	IR GUN #:	1.4	1.6	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #:	0.6	0.8	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #:	1.1	1.3	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #:	1.3	1.5	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #:	0.8	1.0	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #:	0.7	0.9	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #:	1.7	1.9	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #:	0.9	1.1	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #:	1.4	1.6	(Wet Ice) Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None

☐ See Temperature Excursion Form

10/4/2025

Login Container Summary Report

240-234544

11/4/2025

Temperature readings _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
96152-F-20251002-01	240-234544-A-1	Plastic 60 mL - unpreserved				
96152-F-20251002-01	240 234544-B-1	Plastic 60 mL - unpreserved				
96152-F 20251002-01	240-234544-C-1	Plastic 60 mL - unpreserved				
96152-F 20251002-01	240-234544 D-1	Plastic 500ml - with Nitric Acid	<2			
96152-F-20251002-01	240-234544-E-1	Plastic 1 liter - Nitric Acid				
96152-F-20251002-01	240-234544 F 1	Plastic 1 liter - Nitric Acid				
DUP-007-F-20251002-01	240-234544-A-2	Plastic 60 mL - unpreserved				
DUP-007 F 20251002-01	240-234544-B-2	Plastic 60 mL - unpreserved				
DUP-007-F-20251002-01	240-234544-C-2	Plastic 60 mL - unpreserved				
DUP-007-F-20251002-01	240-234544-D-2	Plastic 500ml - with Nitric Acid	<2			
DUP-007-F-20251002-01	240-234544-E-2	Plastic 1 liter - Nitric Acid				
DUP-007 F-20251002-01	240-234544-F 2	Plastic 1 liter Nitric Acid				

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s): N/A	COC No: 240-208918.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: roxanne.cisneros@et.eurofinsus.com	State of Origin: Ohio	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): N/A		Job #: 240-234544-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 11/5/2025			
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Federal CCR Wells	Project #: 24019633			
Site: N/A	SSOW#: N/A			

Analysis Requested

Preservation Codes: -

Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9320_Ra228/PrecSep_0Radium-228 (GFPC)	9315_Ra226/PrecSep_21Radium-226 (GFPC)	Ra226Ra228_GFPCCombined Radium-226 and Radium-228	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
96152-F-20251002-01 (240-234544-1)	10/2/25	11:11 Eastern	G	Water			X	X	X	2	
DUP-007-F-20251002-01 (240-234544-2)	10/2/25	Eastern	G	Water			X	X	X	2	

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

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

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	10/6/25 1432	ES	M. Pinette	OCT 07 2025 0845	
Relinquished by:	Date/Time:	Company	Received by: Meadow Pinette	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 10/10/2024

11/4/2025

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Olszowka, Debbie	Carrier Tracking No(s): N/A	COC No: 240-208918.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Debbie.Olszowka@et.eurofinsus.com	State of Origin: Ohio	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): N/A		Job #: 240-234539-2
Address: 13715 Rider Trail North, ,	Due Date Requested: 11/4/2025			
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Killen Station Assessment Monitoring	Project #: 24024525			
Site: N/A	SSOW#: N/A			

Analysis Requested

Preservation Codes: -

Other: N/A

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_21Radium 226	9320_Ra228/PrecSep_0Radium 228	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
MW-7 (240-234539-1)	10/1/25	14:28 Eastern	G	Water			X	X	2	

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

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

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		10/6/25 1430	EE	M. Pinette	OCT 07 2025 0845	
2	Relinquished by:	Date/Time:	Company	Received by: Meadow Pinette	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:

Ver: 10/10/2024

11/4/2025

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Olszowka, Debbie	Carrier Tracking No(s): N/A	COC No: 240-208918.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Debbie.Olszowka@et.eurofinsus.com	State of Origin: Ohio	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): N/A		Job #: 240-234537-2
Address: 13715 Rider Trail North, ,	Due Date Requested: 11/4/2025			Preservation Codes: -
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Killen Station Groundwater Assessment	Project #: 24024525			Other: N/A
Site: N/A	SSOW#: N/A			

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_21Radium 226	9320_Ra228/PrecSep_0Radium 228	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
MW-5 (240-234537-1)	10/3/25	10:41 Eastern	G	Water			X	X	2	
MW-6 (240-234537-2)	10/3/25	10:51 Eastern	G	Water			X	X	2	

Analysis Requested

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

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

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	[signature]	10/6/25 1430	[illegible]	M. Pinette	OCT 07 2025 0845	
	Relinquished by:	Date/Time:	Company	Received by: Meadow Pinette	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 10/10/2024

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Olszowka, Debbie	Carrier Tracking No(s): N/A	COC No: 240-208918.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Debbie.Olszowka@et.eurofinsus.com	State of Origin: Ohio	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): N/A		Job #: 240-234535-2
Address: 13715 Rider Trail North, ,	Due Date Requested: 11/4/2025			
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Killen Station Groundwater Assessment	Project #: 24024525			
Site: N/A	SSOW#: N/A			

Analysis Requested

Preservation Codes: -

Other: N/A

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_21Radium 226	9320_Ra228/PrecSep_0Radium 228	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
MW-8 (240-234535-1)	10/2/25	10:47 Eastern	G	Water			X	X	2	
MW-4 (240-234535-2)	10/2/25	14:26 Eastern	G	Water			X	X	2	

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

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

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		10/6/25 1630	ET	M. Pinette	OCT 07 2025 0845	
2	Relinquished by:	Date/Time:	Company	Received by: Meadow Pinette	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 10/10/2024

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s): N/A	COC No: 240-208918.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: roxanne.cisneros@et.eurofinsus.com	State of Origin: Ohio	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): N/A		Job #: 240-234533-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 11/5/2025			
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Federal CCR Wells	Project #: 24019633			
Site: N/A	SSOW#: N/A			

Analysis Requested

Preservation Codes: -

Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9320_Ra228/PrecSep_0Radium-228 (GFPC)	9315_Ra226/PrecSep_21Radium-226 (GFPC)	Ra226Ra228_GFPCCombined Radium-226 and Radium-228	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
BAC-01-F-20251001-01 (240-234533-1)	10/1/25	12:06 Eastern	G	Water			X	X	X	2	
BAC-09-F-20251001-01 (240-234533-2)	10/1/25	13:28 Eastern	G	Water			X	X	X	2	
MW-6-F-20251001-01 (240-234533-3)	10/1/25	14:36 Eastern	G	Water			X	X	X	2	
BAC-03-F-20251001-01 (240-234533-4)	10/1/25	15:29 Eastern	G	Water			X	X	X	2	
BAC-03-F-20251001-01 (240-234533-4MS)	10/1/25	15:29 Eastern	G	Water			X	X	X	2	
BAC-03-F-20251001-01 (240-234533-4MSD)	10/1/25	15:29 Eastern	G	Water			X	X	X	2	
MW-1-F-20251002-01 (240-234533-5)	10/2/25	13:05 Eastern	G	Water			X	X	X	2	
BAC-22-F-20251002-01 (240-234533-6)	10/2/25	14:54 Eastern	G	Water			X	X	X	2	

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

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

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		10/6/25 1430	E C	M. Pinette	OCT 07 2025 0845	
2	Relinquished by:	Date/Time:	Company	Received by: Meadow Pinette	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 10/10/2024

11/4/2025

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s): N/A	COC No: 240-208918.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: roxanne.cisneros@et.eurofinsus.com	State of Origin: Ohio	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): N/A		Job #: 240-234530-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 11/5/2025			
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Federal CCR Wells	Project #: 24019633			
Site: N/A	SSOW#: N/A			

Analysis Requested

Preservation Codes: -

Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9320_Ra228/PrecSep_0Radium-228 (GFPC)	9315_Ra226/PrecSep_21Radium-226 (GFPC)	Ra226Ra228_GFPCCombined Radium-226 and Radium-228	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
BAC-23-F-20251003-01 (240-234530-1)	10/3/25	09:55 Eastern	G	Water			X	X	X	2	

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

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

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		10/6/25 1430	LAC	M. Pinette	OCT 07 20250845	
2	Relinquished by:	Date/Time:	Company	Received by: Meadow Pinette	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 10/10/2024

11/4/2025

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Olszowka, Debbie	Carrier Tracking No(s): N/A	COC No: 240-208918.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Debbie.Olszowka@et.eurofinsus.com	State of Origin: Ohio	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): N/A		Job #: 240-234529-2
Address: 13715 Rider Trail North, ,	Due Date Requested: 11/4/2025			
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Killen Station Groundwater Assessment	Project #: 24024525			
Site: N/A	SSOW#: N/A			

Analysis Requested

Preservation Codes: -

Other: N/A

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_21Radium 226	9320_Ra228/PrecSep_0Radium 228	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
MW-12 (240-234529-1)	10/1/25	13:02 Eastern	G	Water			X	X	2	
MW-11 (240-234529-2)	10/1/25	14:42 Eastern	G	Water			X	X	2	
MW-12I (240-234529-3)	10/1/25	11:08 Eastern	G	Water			X	X	2	
MW-13 (240-234529-4)	10/1/25	10:56 Eastern	G	Water			X	X	2	
MW-13I (240-234529-5)	10/1/25	12:07 Eastern	G	Water			X	X	2	

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

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

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		10/6/25 1430	EF	M. Pinette	OCT 07 2025 0845	
2	Relinquished by:	Date/Time:	Company	Received by: Meadow Pinette	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:

Ver: 10/10/2024

11/4/2025

Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-234544-1

Login Number: 234544
List Number: 2
Creator: Pinette, Meadow L

List Source: Eurofins St. Louis
List Creation: 10/07/25 11:34 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?	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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620
Generated 12/2/2025 10:42:50 AM

JOB DESCRIPTION

Federal CCR Wells

JOB NUMBER

240-236335-1

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization

Roxanne Cisneros

Generated
12/2/2025 10:42:50 AM

Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(330)497-9396

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Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-236335-1

Qualifiers

Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

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

Job Narrative
240-236335-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The sample was received on 10/29/2025 8:00 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.7°C and 12.5°C.

Metals
Method 6020B - Total Recoverable: The continuing calibration verification (CCV) associated with batch 240-678855 recovered above the upper control limit for beryllium. The samples associated with this CCV were below the reporting limit for the affected analytes; therefore, the data has been reported. 2025-01-F-20251027-01 (240-236335-1)

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

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

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

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

Method Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-236335-1
Project/Site: Federal CCR Wells

Method	Method Description	Protocol	Laboratory
6010D	Metals (ICP)	SW846	EET CLE
6020B	Metals (ICP/MS)	SW846	EET CLE
7470A	Mercury (CVAA)	SW846	EET CLE
2320 B-2021	Alkalinity	SM	EET CLE
2540 C-2020	Solids, Total Dissolved (TDS)	SM	EET CLE
300.0	Anions, Ion Chromatography	EPA	EET CLE
9315	Radium 226 by GFPC	SW846	EET SL
9320	Radium-228 (GFPC)	SW846	EET SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	EET SL
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CLE
7470A	Preparation, Mercury	SW846	EET CLE
PrecSep_0	Preparation, Precipitate Separation	None	EET SL
PrecSep-21	Preparation, Precipitate Separation (21-Day In-Growth)	None	EET SL

Protocol References:

EPA = US Environmental Protection Agency

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:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

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

Sample Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-236335-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
240-236335-1	2025-01-F-20251027-01	Water	10/27/25 10:41	10/29/25 08:00	Ohio

Detection Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-236335-1

Client Sample ID: 2025-01-F-20251027-01

Lab Sample ID: 240-236335-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1300		100	57	ug/L	1		6010D	Total Recoverable
Arsenic	2.5	J	5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	84		5.0	0.77	ug/L	1		6020B	Total Recoverable
Calcium	250000		1000	250	ug/L	1		6020B	Total Recoverable
Chromium	2.4	J	5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	1.9		1.0	0.086	ug/L	1		6020B	Total Recoverable
Lead	0.76	J	1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	32		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	64000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	28		5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	7800		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	160000		1000	880	ug/L	1		6020B	Total Recoverable
Total Alkalinity	350		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	350		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	1700		10	7.8	mg/L	1		2540 C-2020	Total/NA
Chloride	24		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.21		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	970	F1	10	3.5	mg/L	10		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 2025-01-F-20251027-01
Date Collected: 10/27/25 10:41
Date Received: 10/29/25 08:00

Lab Sample ID: 240-236335-1
Matrix: Water

Method: SW846 6010D - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	1300		100	57	ug/L		10/30/25 14:00	10/31/25 15:36	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		10/30/25 14:00	10/31/25 15:03	1
Arsenic	2.5	J	5.0	0.75	ug/L		10/30/25 14:00	10/31/25 15:03	1
Barium	84		5.0	0.77	ug/L		10/30/25 14:00	10/31/25 15:03	1
Beryllium	ND	^+	1.0	0.27	ug/L		10/30/25 14:00	10/31/25 15:03	1
Cadmium	ND		1.0	0.077	ug/L		10/30/25 14:00	10/31/25 15:03	1
Calcium	250000		1000	250	ug/L		10/30/25 14:00	10/31/25 15:03	1
Chromium	2.4	J	5.0	1.2	ug/L		10/30/25 14:00	10/31/25 15:03	1
Cobalt	1.9		1.0	0.086	ug/L		10/30/25 14:00	10/31/25 15:03	1
Lead	0.76	J	1.0	0.45	ug/L		10/30/25 14:00	10/31/25 15:03	1
Lithium	32		8.0	3.4	ug/L		10/30/25 14:00	10/31/25 15:03	1
Magnesium	64000		1000	61	ug/L		10/30/25 14:00	10/31/25 15:03	1
Molybdenum	28		5.0	1.1	ug/L		10/30/25 14:00	10/31/25 15:03	1
Potassium	7800		1000	220	ug/L		10/30/25 14:00	10/31/25 15:03	1
Selenium	ND		5.0	0.89	ug/L		10/30/25 14:00	10/31/25 15:03	1
Sodium	160000		1000	880	ug/L		10/30/25 14:00	10/31/25 15:03	1
Thallium	ND		1.0	0.51	ug/L		10/30/25 14:00	10/31/25 15:03	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		10/30/25 14:00	10/31/25 11:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	350		5.0	2.6	mg/L			10/30/25 17:18	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	350		5.0	2.6	mg/L			10/30/25 17:18	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			10/30/25 17:18	1
Total Dissolved Solids (SM 2540 C-2020)	1700		10	7.8	mg/L			10/29/25 17:35	1
Chloride (EPA 300.0)	24		1.0	0.13	mg/L			10/30/25 15:12	1
Fluoride (EPA 300.0)	0.21		0.050	0.024	mg/L			10/30/25 15:12	1
Sulfate (EPA 300.0)	970	F1	10	3.5	mg/L			10/30/25 15:40	10

Method: SW846 9315 - Radium 226 by GFPC

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.403		0.223	0.226	1.00	0.299	pCi/L	10/31/25 15:28	12/01/25 17:28	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.5*		*30 - 110*	*10/31/25 15:28*	*12/01/25 17:28*	*1*

Method: SW846 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.39		0.593	0.606	1.00	0.794	pCi/L	10/31/25 15:33	11/30/25 13:46	1

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-236335-1

Client Sample ID: 2025-01-F-20251027-01
Date Collected: 10/27/25 10:41
Date Received: 10/29/25 08:00

Lab Sample ID: 240-236335-1
Matrix: Water

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.5*		*30 - 110*	*10/31/25 15:33*	*11/30/25 13:46*	*1*
Y Carrier	*84.1*		*30 - 110*	*10/31/25 15:33*	*11/30/25 13:46*	*1*

Method: TAL-STL Ra226_Ra228 - Combined Radium-226 and Radium-228

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**1.79**		0.634	0.647	5.00	0.794	pCi/L		12/02/25 09:31	1

Tracer/Carrier Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-236335-1

Method: 9315 - Radium 226 by GFPC

Matrix: Water

Prep Type: Total/NA

		Percent Yield (Acceptance Limits)
		Ba
Lab Sample ID	Client Sample ID	(30-110)
240-236335-1	2025-01-F-20251027-01	89.5
LCS 160-743260/2-A	Lab Control Sample	82.9
MB 160-743260/1-A	Method Blank	86.6

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	(30-110)	(30-110)
240-236335-1	2025-01-F-20251027-01	89.5	84.1
LCS 160-743262/2-A	Lab Control Sample	82.9	81.9
MB 160-743262/1-A	Method Blank	86.6	83.0

Tracer/Carrier Legend

Ba = Ba Carrier

Y = Y Carrier

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 240-678483/1-A
Matrix: Water
Analysis Batch: 678658

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 678483

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		100	57	ug/L		10/30/25 14:00	10/31/25 13:17	1

Lab Sample ID: LCS 240-678483/2-A
Matrix: Water
Analysis Batch: 678658

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 678483

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Boron	1000	1090		ug/L		109	80 - 120

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-678483/1-A
Matrix: Water
Analysis Batch: 678855

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 678483

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		10/30/25 14:00	10/31/25 13:46	1
Arsenic	ND		5.0	0.75	ug/L		10/30/25 14:00	10/31/25 13:46	1
Barium	ND		5.0	0.77	ug/L		10/30/25 14:00	10/31/25 13:46	1
Beryllium	ND	^+	1.0	0.27	ug/L		10/30/25 14:00	10/31/25 13:46	1
Cadmium	ND		1.0	0.077	ug/L		10/30/25 14:00	10/31/25 13:46	1
Calcium	ND		1000	250	ug/L		10/30/25 14:00	10/31/25 13:46	1
Chromium	ND		5.0	1.2	ug/L		10/30/25 14:00	10/31/25 13:46	1
Cobalt	ND		1.0	0.086	ug/L		10/30/25 14:00	10/31/25 13:46	1
Lead	ND		1.0	0.45	ug/L		10/30/25 14:00	10/31/25 13:46	1
Lithium	ND		8.0	3.4	ug/L		10/30/25 14:00	10/31/25 13:46	1
Magnesium	ND		1000	61	ug/L		10/30/25 14:00	10/31/25 13:46	1
Molybdenum	ND		5.0	1.1	ug/L		10/30/25 14:00	10/31/25 13:46	1
Potassium	ND		1000	220	ug/L		10/30/25 14:00	10/31/25 13:46	1
Selenium	ND		5.0	0.89	ug/L		10/30/25 14:00	10/31/25 13:46	1
Sodium	ND		1000	880	ug/L		10/30/25 14:00	10/31/25 13:46	1
Thallium	ND		1.0	0.51	ug/L		10/30/25 14:00	10/31/25 13:46	1

Lab Sample ID: LCS 240-678483/3-A
Matrix: Water
Analysis Batch: 678855

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 678483

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	94.4		ug/L		94	80 - 120
Arsenic	1000	966		ug/L		97	80 - 120
Barium	1000	936		ug/L		94	80 - 120
Beryllium	500	517	^+	ug/L		103	80 - 120
Cadmium	500	457		ug/L		91	80 - 120
Calcium	25000	24300		ug/L		97	80 - 120
Chromium	500	476		ug/L		95	80 - 120
Cobalt	500	476		ug/L		95	80 - 120
Lead	500	475		ug/L		95	80 - 120
Lithium	500	488		ug/L		98	80 - 120
Magnesium	25000	24100		ug/L		96	80 - 120

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

Lab Sample ID: LCS 240-678483/3-A
Matrix: Water
Analysis Batch: 678855

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 678483

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Molybdenum	500	466		ug/L		93	80 - 120
Potassium	25000	24400		ug/L		98	80 - 120
Selenium	1000	940		ug/L		94	80 - 120
Sodium	25000	23900		ug/L		96	80 - 120
Thallium	1000	954		ug/L		95	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-678492/1-A
Matrix: Water
Analysis Batch: 678709

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 678492

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		10/30/25 14:00	10/31/25 10:58	1

Lab Sample ID: LCS 240-678492/2-A
Matrix: Water
Analysis Batch: 678709

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 678492

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	5.00	4.99		ug/L		100	80 - 120

Lab Sample ID: 240-236335-1 MS
Matrix: Water
Analysis Batch: 678709

Client Sample ID: 2025-01-F-20251027-01
Prep Type: Total/NA
Prep Batch: 678492

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		1.00	1.07		ug/L		107	80 - 120

Lab Sample ID: 240-236335-1 MSD
Matrix: Water
Analysis Batch: 678709

Client Sample ID: 2025-01-F-20251027-01
Prep Type: Total/NA
Prep Batch: 678492

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		1.00	0.942		ug/L		94	80 - 120	12	20

Method: 2320 B-2021 - Alkalinity

Lab Sample ID: MB 240-678570/30
Matrix: Water
Analysis Batch: 678570

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	ND		5.0	2.6	mg/L			10/30/25 16:50	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			10/30/25 16:50	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			10/30/25 16:50	1

Method: 2320 B-2021 - Alkalinity (Continued)

Lab Sample ID: MB 240-678570/4
Matrix: Water
Analysis Batch: 678570

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	ND		5.0	2.6	mg/L			10/30/25 13:44	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			10/30/25 13:44	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			10/30/25 13:44	1

Lab Sample ID: LCS 240-678570/29
Matrix: Water
Analysis Batch: 678570

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity	280	267		mg/L		95	85 - 115

Method: 2540 C-2020 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 240-678373/1
Matrix: Water
Analysis Batch: 678373

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	ND		10	7.8	mg/L			10/29/25 17:35	1

Lab Sample ID: LCS 240-678373/2
Matrix: Water
Analysis Batch: 678373

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	285	277		mg/L		97	80 - 120

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-678506/3
Matrix: Water
Analysis Batch: 678506

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.13	mg/L			10/30/25 14:54	1
Fluoride	ND		0.050	0.024	mg/L			10/30/25 14:54	1
Sulfate	ND		1.0	0.35	mg/L			10/30/25 14:54	1

Lab Sample ID: LCS 240-678506/4
Matrix: Water
Analysis Batch: 678506

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	49.1		mg/L		98	90 - 110
Fluoride	2.50	2.49		mg/L		100	90 - 110
Sulfate	50.0	49.7		mg/L		99	90 - 110

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 240-236335-1 MS
Matrix: Water
Analysis Batch: 678506

Client Sample ID: 2025-01-F-20251027-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	24		50.0	74.8		mg/L		101	80 - 120
Fluoride	0.21		2.50	2.70		mg/L		100	80 - 120

Lab Sample ID: 240-236335-1 MS
Matrix: Water
Analysis Batch: 678506

Client Sample ID: 2025-01-F-20251027-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	26		500	528		mg/L		101	80 - 120
Fluoride	ND		25.0	25.6		mg/L		102	80 - 120
Sulfate	970	F1	500	1360	F1	mg/L		78	80 - 120

Lab Sample ID: 240-236335-1 MSD
Matrix: Water
Analysis Batch: 678506

Client Sample ID: 2025-01-F-20251027-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	24		50.0	73.7		mg/L		99	80 - 120	1	15
Fluoride	0.21		2.50	2.64		mg/L		97	80 - 120	2	15

Lab Sample ID: 240-236335-1 MSD
Matrix: Water
Analysis Batch: 678506

Client Sample ID: 2025-01-F-20251027-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	26		500	528		mg/L		100	80 - 120	0	15
Fluoride	ND		25.0	25.6		mg/L		102	80 - 120	0	15
Sulfate	970	F1	500	1370		mg/L		80	80 - 120	1	15

Method: 9315 - Radium 226 by GFPC

Lab Sample ID: MB 160-743260/1-A
Matrix: Water
Analysis Batch: 747226

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 743260

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.009482	U	0.105	0.105	1.00	0.215	pCi/L	10/31/25 15:28	12/01/25 17:18	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.6*		*30 - 110*	*10/31/25 15:28*	*12/01/25 17:18*	*1*

Lab Sample ID: LCS 160-743260/2-A
Matrix: Water
Analysis Batch: 747226

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 743260

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-226	9.57	9.150		1.13	1.00	0.236	pCi/L	96	75 - 125

Method: 9315 - Radium 226 by GFPC (Continued)

Lab Sample ID: LCS 160-743260/2-A
Matrix: Water
Analysis Batch: 747226

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 743260

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*82.9*		*30 - 110*

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-743262/1-A
Matrix: Water
Analysis Batch: 747196

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 743262

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.09343	U	0.407	0.407	1.00	0.738	pCi/L	10/31/25 15:33	11/30/25 13:43	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.6*		*30 - 110*	*10/31/25 15:33*	*11/30/25 13:43*	*1*
Y Carrier	*83.0*		*30 - 110*	*10/31/25 15:33*	*11/30/25 13:43*	*1*

Lab Sample ID: LCS 160-743262/2-A
Matrix: Water
Analysis Batch: 747196

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 743262

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits		
Radium-228			7.89	7.720		1.31	1.00	0.740	pCi/L	98	75 - 125		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*82.9*		*30 - 110*
Y Carrier	*81.9*		*30 - 110*

Metals

Prep Batch: 678483

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-236335-1	2025-01-F-20251027-01	Total Recoverable	Water	3005A	
MB 240-678483/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-678483/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-678483/3-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 678492

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-236335-1	2025-01-F-20251027-01	Total/NA	Water	7470A	
MB 240-678492/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-678492/2-A	Lab Control Sample	Total/NA	Water	7470A	
240-236335-1 MS	2025-01-F-20251027-01	Total/NA	Water	7470A	
240-236335-1 MSD	2025-01-F-20251027-01	Total/NA	Water	7470A	

Analysis Batch: 678658

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-236335-1	2025-01-F-20251027-01	Total Recoverable	Water	6010D	678483
MB 240-678483/1-A	Method Blank	Total Recoverable	Water	6010D	678483
LCS 240-678483/2-A	Lab Control Sample	Total Recoverable	Water	6010D	678483

Analysis Batch: 678709

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-236335-1	2025-01-F-20251027-01	Total/NA	Water	7470A	678492
MB 240-678492/1-A	Method Blank	Total/NA	Water	7470A	678492
LCS 240-678492/2-A	Lab Control Sample	Total/NA	Water	7470A	678492
240-236335-1 MS	2025-01-F-20251027-01	Total/NA	Water	7470A	678492
240-236335-1 MSD	2025-01-F-20251027-01	Total/NA	Water	7470A	678492

Analysis Batch: 678855

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-236335-1	2025-01-F-20251027-01	Total Recoverable	Water	6020B	678483
MB 240-678483/1-A	Method Blank	Total Recoverable	Water	6020B	678483
LCS 240-678483/3-A	Lab Control Sample	Total Recoverable	Water	6020B	678483

General Chemistry

Analysis Batch: 678373

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-236335-1	2025-01-F-20251027-01	Total/NA	Water	2540 C-2020	
MB 240-678373/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-678373/2	Lab Control Sample	Total/NA	Water	2540 C-2020	

Analysis Batch: 678506

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-236335-1	2025-01-F-20251027-01	Total/NA	Water	300.0	
240-236335-1	2025-01-F-20251027-01	Total/NA	Water	300.0	
MB 240-678506/3	Method Blank	Total/NA	Water	300.0	
LCS 240-678506/4	Lab Control Sample	Total/NA	Water	300.0	
240-236335-1 MS	2025-01-F-20251027-01	Total/NA	Water	300.0	
240-236335-1 MS	2025-01-F-20251027-01	Total/NA	Water	300.0	
240-236335-1 MSD	2025-01-F-20251027-01	Total/NA	Water	300.0	
240-236335-1 MSD	2025-01-F-20251027-01	Total/NA	Water	300.0	

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-236335-1

General Chemistry

Analysis Batch: 678570

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-236335-1	2025-01-F-20251027-01	Total/NA	Water	2320 B-2021	
MB 240-678570/30	Method Blank	Total/NA	Water	2320 B-2021	
MB 240-678570/4	Method Blank	Total/NA	Water	2320 B-2021	
LCS 240-678570/29	Lab Control Sample	Total/NA	Water	2320 B-2021	

Rad

Prep Batch: 743260

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-236335-1	2025-01-F-20251027-01	Total/NA	Water	PrecSep-21	
MB 160-743260/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-743260/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

Prep Batch: 743262

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-236335-1	2025-01-F-20251027-01	Total/NA	Water	PrecSep_0	
MB 160-743262/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-743262/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-236335-1

Client Sample ID: 2025-01-F-20251027-01
Date Collected: 10/27/25 10:41
Date Received: 10/29/25 08:00

Lab Sample ID: 240-236335-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			678483	MN7X	EET CLE	10/30/25 14:00
Total Recoverable	Analysis	6010D		1	678658	KLC	EET CLE	10/31/25 15:36
Total Recoverable	Prep	3005A			678483	MN7X	EET CLE	10/30/25 14:00
Total Recoverable	Analysis	6020B		1	678855	S4FJ	EET CLE	10/31/25 15:03
Total/NA	Prep	7470A			678492	MN7X	EET CLE	10/30/25 14:00
Total/NA	Analysis	7470A		1	678709	GEV	EET CLE	10/31/25 11:15
Total/NA	Analysis	2320 B-2021		1	678570	JWW	EET CLE	10/30/25 17:18
Total/NA	Analysis	2540 C-2020		1	678373	PQD2	EET CLE	10/29/25 17:35
Total/NA	Analysis	300.0		1	678506	JMR	EET CLE	10/30/25 15:12
Total/NA	Analysis	300.0		10	678506	JMR	EET CLE	10/30/25 15:40
Total/NA	Prep	PrecSep-21			743260	AMS	EET SL	10/31/25 15:28
Total/NA	Analysis	9315		1	747376	FLC	EET SL	12/01/25 17:28
Total/NA	Prep	PrecSep_0			743262	AMS	EET SL	10/31/25 15:33
Total/NA	Analysis	9320		1	747193	FLC	EET SL	11/30/25 13:46
Total/NA	Analysis	Ra226_Ra228		1	747372	CAH	EET SL	12/02/25 09:31

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

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

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-236335-1
Project/Site: Federal CCR Wells

Laboratory: Eurofins Cleveland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0806	11-03-25
Georgia	State	4062	02-27-26
Illinois	NELAP	200004	08-31-26
Iowa	State	421	06-01-27
Kansas	NELAP	E-10336	01-31-26
Kentucky (UST)	State	112225	02-28-26
Kentucky (WW)	State	KY98016	12-31-25
Minnesota	NELAP	039-999-348	12-31-25
New Hampshire	NELAP	2250	09-30-26
New Jersey	NELAP	OH001	06-30-26
New York	NELAP	10975	04-01-26
North Dakota	State	R-244	02-27-26
Ohio	State	8303	02-27-26
Ohio VAP	State	ORELAP 4062	02-28-26
Oregon	NELAP	4062	02-27-26
Pennsylvania	NELAP	68-00340	08-31-26
Texas	NELAP	T104704517	08-31-26
US Fish & Wildlife	US Federal Programs	A26406	02-28-26
USDA	US Federal Programs	P330-18-00281	01-05-27
Virginia	NELAP	460175	11-09-25
West Virginia DEP	State	210	12-31-25
Wisconsin	State	399167560	08-31-26

Laboratory: Eurofins St. Louis

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-001	05-06-27
ANAB	Dept. of Defense ELAP	L2305	04-06-27
ANAB	Dept. of Energy	L2305.01	04-06-27
ANAB	ISO/IEC 17025	L2305	04-06-27
Arizona	State	AZ0813	12-08-25
California	Los Angeles County Sanitation Districts	10259	06-30-22 *
California	State	2886	07-01-26
Connecticut	State	PH-0241	03-31-27
Florida	NELAP	E87689	06-30-26
HI - RadChem Recognition	State	n/a	06-30-26
Illinois	NELAP	200023	11-30-25 *
Iowa	State	373	12-01-26
Kansas	NELAP	E-10236	10-31-26
Kentucky (DW)	State	KY90125	12-31-25
Kentucky (WW)	State	KY90125 (Permit KY0004049)	12-31-25
Louisiana (All)	NELAP	106151	06-30-26
Louisiana (DW)	State	LA011	12-31-25
Maryland	State	310	10-01-26
Massachusetts	State	M-MO054	06-30-26
MI - RadChem Recognition	State	9005	06-30-26
Missouri	State	780	06-30-28
Nevada	State	MO00054	07-31-26

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-236335-1
Project/Site: Federal CCR Wells

Laboratory: Eurofins St. Louis (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New Jersey	NELAP	MO002	06-30-26
New Mexico	State	MO00054	06-30-26
New York	NELAP	11616	03-31-26
North Carolina (DW)	State	29700	06-30-26
North Dakota	State	R-207	06-30-25 *
Oklahoma	NELAP	9997	12-31-25
Oregon	NELAP	4157	09-01-26
Pennsylvania	NELAP	68-00540	02-28-26
South Carolina	State	85002	06-30-26
Texas	NELAP	T104704193	07-31-26
US Fish & Wildlife	US Federal Programs	058448	07-31-26
USDA	US Federal Programs	525-23-138-94730	05-18-26
Utah	NELAP	MO00054	07-31-26
Virginia	NELAP	460230	06-14-26
Washington	State	C592	08-31-26
West Virginia DEP	State	381	11-30-26

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

COLUMBUS 209

eurofins Environment Testing

Client Information	Sampler: Bobby Casto	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s):	COC No.: 240-111832-39818.1
Client Contact: Taylor Huffman	Phone: 740-373-4308	E-Mail: roxanne.cisneros@et.eurofinsus.com	State of Origin:	Page: Page 1 of 8
Company: Lightstone Generation Gavin Power LLC	PWSID			Job #:
Address: 7397 OH-7	Due Date Requested:			
City: Cheshire	TAT Requested (days):			
State, Zip: OH, 45620	Compliance Project: Δ Yes Δ No			
Phone: 740-925-3171(Tel)	PO #: 2935505			
Email: taylor.huffman@lightstonegen.com	WO #:			
Project Name: Gavin CCR	Project #: 24019633			
Site: Gavin	SSOW#:			

Analysis Requested

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B, 6020, 7470A	2540C_Calcd - TDS	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	300.0_28D - Chloride, Fluoride & Sulfate	2320B - (MOD) Alkalinity	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	N	D	N	N		
2025-01-F-20251027-01	10-27-25	1041	G	Water			1	1	2	1	1		
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									
				Water									

240-236335 COC

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
[signature]	10-27-25 1130	KEMRON	Ashley McCloskey	10-28-25 1230	EURO
Relinquished by: Ashley McCloskey	Date/Time: 10-28-25 1710	Company EURO	Received by: Martin	Date/Time: 10/29/25 800	Company EUR
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 06/08/2021

Eurofins – Cleveland Sample Receipt Form/Narrative Login # _____
Barberton Facility

Client Lightstone Gavin Site Name _____ Cooler unpacked by: KMartin

Cooler Received on 10/29/25 Opened on 10/29/25

FedEx: 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other _____

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

Eurofins Cooler # EC 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 # 13 (CF +0.6 °C) Observed Cooler Temp _____ °C Corrected Cooler Temp _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1	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# HC567196
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

Labeled by:

Labels Verified 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 # _____

Eurofins - Cleveland Sample Receipt Multiple Cooler Form

Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
(EC) Client Box Other	IR GUN #: 13	0.1	0.7	(Wet Ice) Blue Ice Dry Ice Water None
(EC) Client Box Other	IR GUN #: 1	11.9	12.5	Wet Ice Blue Ice Dry Ice Water (None)
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None

10/29/2025

Login Container Summary Report

240-236335

12/2/2025

Temperature readings _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
2025-01 F-20251027-01	240-236335 A 1	Plastic 60 mL - unpreserved				
2025-01-F-20251027-01	240-236335-B-1	Plastic 60 mL - unpreserved				
2025-01-F-20251027-01	240-236335-C-1	Plastic 500ml unpreserved				
2025-01-F-20251027-01	240-236335-D-1	Plastic 500ml - with Nitric Acid	<2			
2025-01-F-20251027-01	240 236335 E-1	Plastic 1 liter - Nitric Acid	<2			
2025-01-F-20251027-01	240-236335-F-1	Plastic 1 liter - Nitric Acid	<2			

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton, OH 44203
Phone: 330-497-9396 Fax: 330-497-0772

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s): N/A	COC No: 240-210176.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: roxanne.cisneros@et.eurofinsus.com	State of Origin: Ohio	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): N/A		Job #: 240-236335-1
Address: 13715 Rider Trail North, ,	Due Date Requested: 12/2/2025			
City: Earth City	TAT Requested (days): N/A			
State, Zip: MO, 63045				
Phone: 314-298-8566(Tel) 314-298-8757(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: Federal CCR Wells	Project #: 24019633			
Site: N/A	SSOW#: N/A			

Analysis Requested

Preservation Codes: -

Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9320_Ra228/PrecSep_0Radium-228 (GFPC)	9315_Ra226/PrecSep_21Radium-226 (GFPC)	Ra226Ra228_GFPCCombined Radium-226 and Radium-228	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
2025-01-F-20251027-01 (240-236335-1)	10/27/25	10:41 Eastern	G	Water			X	X	X	2	

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

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

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	JAYDEN COLLINS	10-24-25 1607	EAR		0830 OCT 30 2025	
	Relinquished by:	Date/Time:	Company	Received by: Cheyenne Forrest	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: 10/10/2024

12/2/2025

Login Sample Receipt Checklist

Client: Lightstone Generation Gavin Power LLC

Job Number: 240-236335-1

Login Number: 236335
List Number: 2
Creator: Forrest, Cheyenne L

List Source: Eurofins St. Louis
List Creation: 10/30/25 12:25 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.	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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Taylor Huffman
Lightstone Generation Gavin Power LLC
7397 OH-7
Cheshire, Ohio 45620

Generated 12/31/2025 12:58:21 PM

JOB DESCRIPTION

Federal CCR Wells

JOB NUMBER

240-240707-1

Eurofins Cleveland
180 S. Van Buren Avenue
Barberton OH 44203

See page two for job notes and contact information.

my EOL

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization

Roxanne Cisneros

Generated
12/31/2025 12:58:21 PM

Authorized for release by
Roxanne Cisneros, Senior Project Manager
roxanne.cisneros@et.eurofinsus.com
(330)497-9396

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Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-240707-1

Qualifiers

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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.

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: 240-240707-1 — Eurofins Cleveland

Job Narrative
240-240707-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The samples were received on 12/26/2025 12:15 PM. 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 3.8°C, 3.9°C, 4.2°C, 5.2°C and 5.4°C.

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

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

Method Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-240707-1
Project/Site: Federal CCR Wells

Method	Method Description	Protocol	Laboratory
6020B	Metals (ICP/MS)	SW846	EET CLE
7470A	Mercury (CVAA)	SW846	EET CLE
2320 B-2021	Alkalinity	SM	EET CLE
2540 C-2020	Solids, Total Dissolved (TDS)	SM	EET CLE
300.0	Anions, Ion Chromatography	EPA	EET CLE
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET CLE
7470A	Preparation, Mercury	SW846	EET CLE

Protocol References:

EPA = US Environmental Protection Agency

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

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

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Sample Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-240707-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
240-240707-1	94137-F-20251222-01	Water	12/22/25 13:12	12/26/25 12:15	Ohio
240-240707-2	EB-001-F-20251222-01	Water	12/22/25 14:10	12/26/25 12:15	Ohio

Detection Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-240707-1

Client Sample ID: 94137-F-20251222-01 — Lab Sample ID: 240-240707-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	6.1		5.0	0.75	ug/L	1		6020B	Total Recoverable
Barium	62		5.0	0.77	ug/L	1		6020B	Total Recoverable
Beryllium	0.28	J	1.0	0.27	ug/L	1		6020B	Total Recoverable
Boron	31		20	16	ug/L	1		6020B	Total Recoverable
Cadmium	0.25	J	1.0	0.077	ug/L	1		6020B	Total Recoverable
Calcium	150000		1000	250	ug/L	1		6020B	Total Recoverable
Chromium	6.3		5.0	1.2	ug/L	1		6020B	Total Recoverable
Cobalt	5.8	B	1.0	0.086	ug/L	1		6020B	Total Recoverable
Lead	2.9		1.0	0.45	ug/L	1		6020B	Total Recoverable
Lithium	13		8.0	3.4	ug/L	1		6020B	Total Recoverable
Magnesium	49000		1000	61	ug/L	1		6020B	Total Recoverable
Molybdenum	3.5	J	5.0	1.1	ug/L	1		6020B	Total Recoverable
Potassium	5400		1000	220	ug/L	1		6020B	Total Recoverable
Sodium	74000		1000	880	ug/L	1		6020B	Total Recoverable
Total Alkalinity	380		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	380		5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Total Dissolved Solids	870		10	7.8	mg/L	1		2540 C-2020	Total/NA
Chloride	29		1.0	0.13	mg/L	1		300.0	Total/NA
Fluoride	0.12		0.050	0.024	mg/L	1		300.0	Total/NA
Sulfate	330		5.0	1.7	mg/L	5		300.0	Total/NA

Client Sample ID: EB-001-F-20251222-01 — Lab Sample ID: 240-240707-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Alkalinity	2.6	J	5.0	2.6	mg/L	1		2320 B-2021	Total/NA
Bicarbonate Alkalinity as CaCO3	2.6	J	5.0	2.6	mg/L	1		2320 B-2021	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-240707-1

Client Sample ID: 94137-F-20251222-01

Date Collected: 12/22/25 13:12
Date Received: 12/26/25 12:15

Lab Sample ID: 240-240707-1

Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		12/29/25 14:00	12/30/25 13:06	1
Arsenic	**6.1**		5.0	0.75	ug/L		12/29/25 14:00	12/30/25 13:06	1
Barium	**62**		5.0	0.77	ug/L		12/29/25 14:00	12/30/25 13:06	1
Beryllium	**0.28**	**J**	1.0	0.27	ug/L		12/29/25 14:00	12/30/25 13:06	1
Boron	**31**		20	16	ug/L		12/29/25 14:00	12/31/25 09:58	1
Cadmium	**0.25**	**J**	1.0	0.077	ug/L		12/29/25 14:00	12/30/25 13:06	1
Calcium	**150000**		1000	250	ug/L		12/29/25 14:00	12/30/25 13:06	1
Chromium	**6.3**		5.0	1.2	ug/L		12/29/25 14:00	12/30/25 13:06	1
Cobalt	**5.8**	**B**	1.0	0.086	ug/L		12/29/25 14:00	12/30/25 13:06	1
Lead	**2.9**		1.0	0.45	ug/L		12/29/25 14:00	12/30/25 13:06	1
Lithium	**13**		8.0	3.4	ug/L		12/29/25 14:00	12/30/25 13:06	1
Magnesium	**49000**		1000	61	ug/L		12/29/25 14:00	12/30/25 13:06	1
Molybdenum	**3.5**	**J**	5.0	1.1	ug/L		12/29/25 14:00	12/30/25 13:06	1
Potassium	**5400**		1000	220	ug/L		12/29/25 14:00	12/30/25 13:06	1
Selenium	ND		5.0	0.89	ug/L		12/29/25 14:00	12/30/25 13:06	1
Sodium	**74000**		1000	880	ug/L		12/29/25 14:00	12/30/25 13:06	1
Thallium	ND		1.0	0.51	ug/L		12/29/25 14:00	12/30/25 13:06	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		12/29/25 14:00	12/30/25 10:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	**380**		5.0	2.6	mg/L			12/29/25 13:01	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**380**		5.0	2.6	mg/L			12/29/25 13:01	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			12/29/25 13:01	1
Total Dissolved Solids (SM 2540 C-2020)	**870**		10	7.8	mg/L			12/29/25 08:34	1
Chloride (EPA 300.0)	**29**		1.0	0.13	mg/L			12/30/25 00:47	1
Fluoride (EPA 300.0)	**0.12**		0.050	0.024	mg/L			12/30/25 00:47	1
Sulfate (EPA 300.0)	**330**		5.0	1.7	mg/L			12/30/25 01:05	5

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-240707-1

Client Sample ID: EB-001-F-20251222-01

Date Collected: 12/22/25 14:10
Date Received: 12/26/25 12:15

Lab Sample ID: 240-240707-2

Matrix: Water

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		12/29/25 14:00	12/30/25 13:09	1
Arsenic	ND		5.0	0.75	ug/L		12/29/25 14:00	12/30/25 13:09	1
Barium	ND		5.0	0.77	ug/L		12/29/25 14:00	12/30/25 13:09	1
Beryllium	ND		1.0	0.27	ug/L		12/29/25 14:00	12/30/25 13:09	1
Boron	ND		20	16	ug/L		12/29/25 14:00	12/31/25 10:01	1
Cadmium	ND		1.0	0.077	ug/L		12/29/25 14:00	12/30/25 13:09	1
Calcium	ND		1000	250	ug/L		12/29/25 14:00	12/30/25 13:09	1
Chromium	ND		5.0	1.2	ug/L		12/29/25 14:00	12/30/25 13:09	1
Cobalt	ND		1.0	0.086	ug/L		12/29/25 14:00	12/30/25 13:09	1
Lead	ND		1.0	0.45	ug/L		12/29/25 14:00	12/30/25 13:09	1
Lithium	ND		8.0	3.4	ug/L		12/29/25 14:00	12/30/25 13:09	1
Magnesium	ND		1000	61	ug/L		12/29/25 14:00	12/30/25 13:09	1
Molybdenum	ND		5.0	1.1	ug/L		12/29/25 14:00	12/30/25 13:09	1
Potassium	ND		1000	220	ug/L		12/29/25 14:00	12/30/25 13:09	1
Selenium	ND		5.0	0.89	ug/L		12/29/25 14:00	12/30/25 13:09	1
Sodium	ND		1000	880	ug/L		12/29/25 14:00	12/30/25 13:09	1
Thallium	ND		1.0	0.51	ug/L		12/29/25 14:00	12/30/25 13:09	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		12/29/25 14:00	12/30/25 10:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity (SM 2320 B-2021)	**2.6**	**J**	5.0	2.6	mg/L			12/29/25 13:10	1
Bicarbonate Alkalinity as CaCO3 (SM 2320 B-2021)	**2.6**	**J**	5.0	2.6	mg/L			12/29/25 13:10	1
Carbonate Alkalinity as CaCO3 (SM 2320 B-2021)	ND		5.0	2.6	mg/L			12/29/25 13:10	1
Total Dissolved Solids (SM 2540 C-2020)	ND		10	7.8	mg/L			12/29/25 08:34	1
Chloride (EPA 300.0)	ND		1.0	0.13	mg/L			12/29/25 22:40	1
Fluoride (EPA 300.0)	ND		0.050	0.024	mg/L			12/29/25 22:40	1
Sulfate (EPA 300.0)	ND		1.0	0.35	mg/L			12/29/25 22:40	1

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 240-685907/1-A
Matrix: Water
Analysis Batch: 686092

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 685907

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.57	ug/L		12/29/25 14:00	12/30/25 10:52	1
Arsenic	ND		5.0	0.75	ug/L		12/29/25 14:00	12/30/25 10:52	1
Barium	ND		5.0	0.77	ug/L		12/29/25 14:00	12/30/25 10:52	1
Beryllium	ND		1.0	0.27	ug/L		12/29/25 14:00	12/30/25 10:52	1
Boron	ND		20	16	ug/L		12/29/25 14:00	12/30/25 10:52	1
Cadmium	ND		1.0	0.077	ug/L		12/29/25 14:00	12/30/25 10:52	1
Calcium	ND		1000	250	ug/L		12/29/25 14:00	12/30/25 10:52	1
Chromium	ND		5.0	1.2	ug/L		12/29/25 14:00	12/30/25 10:52	1
Cobalt	0.0860	J	1.0	0.086	ug/L		12/29/25 14:00	12/30/25 10:52	1
Lead	ND		1.0	0.45	ug/L		12/29/25 14:00	12/30/25 10:52	1
Lithium	ND		8.0	3.4	ug/L		12/29/25 14:00	12/30/25 10:52	1
Magnesium	ND		1000	61	ug/L		12/29/25 14:00	12/30/25 10:52	1
Molybdenum	ND		5.0	1.1	ug/L		12/29/25 14:00	12/30/25 10:52	1
Potassium	ND		1000	220	ug/L		12/29/25 14:00	12/30/25 10:52	1
Selenium	ND		5.0	0.89	ug/L		12/29/25 14:00	12/30/25 10:52	1
Sodium	ND		1000	880	ug/L		12/29/25 14:00	12/30/25 10:52	1
Thallium	ND		1.0	0.51	ug/L		12/29/25 14:00	12/30/25 10:52	1

Lab Sample ID: LCS 240-685907/2-A
Matrix: Water
Analysis Batch: 686092

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 685907

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	102		ug/L		102	80 - 120
Arsenic	1000	1010		ug/L		101	80 - 120
Barium	1000	993		ug/L		99	80 - 120
Beryllium	500	534		ug/L		107	80 - 120
Boron	100	104		ug/L		104	80 - 120
Cadmium	500	515		ug/L		103	80 - 120
Calcium	25000	25500		ug/L		102	80 - 120
Chromium	500	510		ug/L		102	80 - 120
Cobalt	500	522		ug/L		104	80 - 120
Lead	500	510		ug/L		102	80 - 120
Lithium	500	536		ug/L		107	80 - 120
Magnesium	25000	25800		ug/L		103	80 - 120
Molybdenum	500	505		ug/L		101	80 - 120
Potassium	25000	25700		ug/L		103	80 - 120
Selenium	1000	1020		ug/L		102	80 - 120
Sodium	25000	25600		ug/L		102	80 - 120
Thallium	1000	1020		ug/L		102	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-685914/1-A
Matrix: Water
Analysis Batch: 686093

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 685914

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.13	ug/L		12/29/25 14:00	12/30/25 09:51	1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 240-685914/2-A
Matrix: Water
Analysis Batch: 686093

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 685914

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			5.00	4.92		ug/L		98	80 - 120		

Method: 2320 B-2021 - Alkalinity

Lab Sample ID: MB 240-685976/5
Matrix: Water
Analysis Batch: 685976

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	ND		5.0	2.6	mg/L			12/29/25 12:18	1
Bicarbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			12/29/25 12:18	1
Carbonate Alkalinity as CaCO3	ND		5.0	2.6	mg/L			12/29/25 12:18	1

Lab Sample ID: LCS 240-685976/4
Matrix: Water
Analysis Batch: 685976

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Alkalinity			280	271		mg/L		97	85 - 115		

Method: 2540 C-2020 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 240-685864/1
Matrix: Water
Analysis Batch: 685864

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	ND		10	7.8	mg/L			12/29/25 08:34	1

Lab Sample ID: LCS 240-685864/2
Matrix: Water
Analysis Batch: 685864

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			285	256		mg/L		90	80 - 120		

Lab Sample ID: 240-240707-1 DU
Matrix: Water
Analysis Batch: 685864

Client Sample ID: 94137-F-20251222-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	870			880		mg/L				0.8	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 240-685969/3
Matrix: Water
Analysis Batch: 685969

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.13	mg/L			12/29/25 21:09	1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 240-685969/3
Matrix: Water
Analysis Batch: 685969

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.050	0.024	mg/L			12/29/25 21:09	1
Sulfate	ND		1.0	0.35	mg/L			12/29/25 21:09	1

Lab Sample ID: LCS 240-685969/4
Matrix: Water
Analysis Batch: 685969

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	52.7		mg/L		105	90 - 110
Fluoride	2.50	2.68		mg/L		107	90 - 110
Sulfate	50.0	53.2		mg/L		106	90 - 110

Metals

Prep Batch: 685907

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-240707-1	94137-F-20251222-01	Total Recoverable	Water	3005A	
240-240707-2	EB-001-F-20251222-01	Total Recoverable	Water	3005A	
MB 240-685907/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 240-685907/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 685914

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-240707-1	94137-F-20251222-01	Total/NA	Water	7470A	
240-240707-2	EB-001-F-20251222-01	Total/NA	Water	7470A	
MB 240-685914/1-A	Method Blank	Total/NA	Water	7470A	
LCS 240-685914/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 686092

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-240707-1	94137-F-20251222-01	Total Recoverable	Water	6020B	685907
240-240707-2	EB-001-F-20251222-01	Total Recoverable	Water	6020B	685907
MB 240-685907/1-A	Method Blank	Total Recoverable	Water	6020B	685907
LCS 240-685907/2-A	Lab Control Sample	Total Recoverable	Water	6020B	685907

Analysis Batch: 686093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-240707-1	94137-F-20251222-01	Total/NA	Water	7470A	685914
240-240707-2	EB-001-F-20251222-01	Total/NA	Water	7470A	685914
MB 240-685914/1-A	Method Blank	Total/NA	Water	7470A	685914
LCS 240-685914/2-A	Lab Control Sample	Total/NA	Water	7470A	685914

Analysis Batch: 686216

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-240707-1	94137-F-20251222-01	Total Recoverable	Water	6020B	685907
240-240707-2	EB-001-F-20251222-01	Total Recoverable	Water	6020B	685907

General Chemistry

Analysis Batch: 685864

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-240707-1	94137-F-20251222-01	Total/NA	Water	2540 C-2020	
240-240707-2	EB-001-F-20251222-01	Total/NA	Water	2540 C-2020	
MB 240-685864/1	Method Blank	Total/NA	Water	2540 C-2020	
LCS 240-685864/2	Lab Control Sample	Total/NA	Water	2540 C-2020	
240-240707-1 DU	94137-F-20251222-01	Total/NA	Water	2540 C-2020	

Analysis Batch: 685969

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-240707-1	94137-F-20251222-01	Total/NA	Water	300.0	
240-240707-1	94137-F-20251222-01	Total/NA	Water	300.0	
240-240707-2	EB-001-F-20251222-01	Total/NA	Water	300.0	
MB 240-685969/3	Method Blank	Total/NA	Water	300.0	
LCS 240-685969/4	Lab Control Sample	Total/NA	Water	300.0	

QC Association Summary

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-240707-1

General Chemistry

Analysis Batch: 685976

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-240707-1	94137-F-20251222-01	Total/NA	Water	2320 B-2021	
240-240707-2	EB-001-F-20251222-01	Total/NA	Water	2320 B-2021	
MB 240-685976/5	Method Blank	Total/NA	Water	2320 B-2021	
LCS 240-685976/4	Lab Control Sample	Total/NA	Water	2320 B-2021	

Lab Chronicle

Client: Lightstone Generation Gavin Power LLC
Project/Site: Federal CCR Wells

Job ID: 240-240707-1

Client Sample ID: 94137-F-20251222-01

Lab Sample ID: 240-240707-1

Date Collected: 12/22/25 13:12

Matrix: Water

Date Received: 12/26/25 12:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			685907	MN7X	EET CLE	12/29/25 14:00
Total Recoverable	Analysis	6020B		1	686092	S4FJ	EET CLE	12/30/25 13:06
Total Recoverable	Prep	3005A			685907	MN7X	EET CLE	12/29/25 14:00
Total Recoverable	Analysis	6020B		1	686216	S4FJ	EET CLE	12/31/25 09:58
Total/NA	Prep	7470A			685914	MN7X	EET CLE	12/29/25 14:00
Total/NA	Analysis	7470A		1	686093	TQ6W	EET CLE	12/30/25 10:11
Total/NA	Analysis	2320 B-2021		1	685976	PQD2	EET CLE	12/29/25 13:01
Total/NA	Analysis	2540 C-2020		1	685864	C5SV	EET CLE	12/29/25 08:34
Total/NA	Analysis	300.0		1	685969	AAP	EET CLE	12/30/25 00:47
Total/NA	Analysis	300.0		5	685969	AAP	EET CLE	12/30/25 01:05

Client Sample ID: EB-001-F-20251222-01

Lab Sample ID: 240-240707-2

Date Collected: 12/22/25 14:10

Matrix: Water

Date Received: 12/26/25 12:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			685907	MN7X	EET CLE	12/29/25 14:00
Total Recoverable	Analysis	6020B		1	686092	S4FJ	EET CLE	12/30/25 13:09
Total Recoverable	Prep	3005A			685907	MN7X	EET CLE	12/29/25 14:00
Total Recoverable	Analysis	6020B		1	686216	S4FJ	EET CLE	12/31/25 10:01
Total/NA	Prep	7470A			685914	MN7X	EET CLE	12/29/25 14:00
Total/NA	Analysis	7470A		1	686093	TQ6W	EET CLE	12/30/25 10:13
Total/NA	Analysis	2320 B-2021		1	685976	PQD2	EET CLE	12/29/25 13:10
Total/NA	Analysis	2540 C-2020		1	685864	C5SV	EET CLE	12/29/25 08:34
Total/NA	Analysis	300.0		1	685969	AAP	EET CLE	12/29/25 22:40

Laboratory References:

EET CLE = Eurofins Cleveland, 180 S. Van Buren Avenue, Barberton, OH 44203, TEL (330)497-9396

Accreditation/Certification Summary

Client: Lightstone Generation Gavin Power LLC
Job ID: 240-240707-1
Project/Site: Federal CCR Wells

Laboratory: Eurofins Cleveland

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0806	09-30-26
Georgia	State	4062	02-27-26
Illinois	NELAP	200004	08-31-26
Iowa	State	421	06-01-27
Kansas	NELAP	E-10336	01-31-26
Kentucky (UST)	State	112225	02-27-26
Kentucky (WW)	State	KY98016	12-31-25
Minnesota	NELAP	039-999-348	12-31-26
New Hampshire	NELAP	2250	09-30-26
New Jersey	NELAP	OH001	06-30-26
New York	NELAP	10975	04-01-26
North Dakota	State	R-244	02-27-26
Ohio	State	8303	02-27-26
Ohio VAP	State	ORELAP 4062	02-27-26
Oregon	NELAP	4062	02-27-26
Pennsylvania	NELAP	68-00340	08-31-26
Texas	NELAP	T104704517	08-31-26
US Fish & Wildlife	US Federal Programs	A26406	02-28-26
USDA	US Federal Programs	525-24-5-34740	01-05-27
Virginia	NELAP	460175	09-30-26
West Virginia DEP	State	210	12-31-25
Wisconsin	State	399167560	08-31-26

JC 12/26/25
443/15.0

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: Bobby Cesto	Lab PM: Cisneros, Roxanne	Carrier Tracking No(s):	COC No: 240-93017.34501
Client Contact: Taylor Huffman	Phone: 740-353-4308	E-Mail: roxanne.cisneros@Eurofinset.com	State of Origin:	Page: Page 1 of 1
Company: Lightstone Generation Gavin Power LLC	PWSID:			Job #:

Address: 7397 OH-7	Due Date Requested:	Analysis Requested
City: Cheshire	TAT Requested (days):	
State, Zip: OH, 45620	Compliance Project: Δ Yes Δ No	
Phone: 740-925-3171(Tel)	PO #: 2935505	
Email: taylor.huffman@lightstonegen.com	WO #:	
Project Name: Gavin CCR	Project #: 24019633	
Site: Ohio	SSOW#:	

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B, 6020, 7470A	2520C_Calcd - TDS	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	300.0_28D + Chloride, Fluoride & Sulfate	2320B - (MOD) Alkalinity	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	N	D	N	N		
94137-F-20251222-01	12-22-25	1312	G	W			1	1		1	1	4	
EB-001-F-20251222-01	12-22-25	1410	G	W			1	1		1	1	4	

240-240707 COC

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify)	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: 12/26/25

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	12-22-25 1450	KCM&L	Wyatt Parsley	12/26/25 8:49	Auto Options
Relinquished by: Wyatt Parsley	Date/Time: 12/26/25 12:15P	Company Auto Options	Received by:	Date/Time: 12/26/25 1215	Company EC
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 06/08/2021

Eurofins – Cleveland Sample Receipt Form/Narrative Login # _____
Barberton Facility

Client Lights Home Savin Site Name _____ Cooler unpacked by: JC
Cooler Received on 12-24-25 Opened on 12-26-25
FedEx: 1st Grd Exp UPS FAS Waypoint Client Drop Off Eurofins Courier Other _____
Receipt After-hours Drop-off Date/Time _____ Storage Location _____
Eurofins Cooler # 2 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 # 17 (CF 0.7 °C) Observed Cooler Temp ___.___ °C Corrected Cooler Temp ___.___ °C

2	Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity_____	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# HC567196
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 | Labeled by: | Labels Verified 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 # _____

Eurofins - Cleveland Sample Receipt Multiple Cooler Form

Cooler Description (Circle)	IR Gun # (Circle)	Observed Temp °C	Corrected Temp °C	Coolant (Circle)
EC Client Box Other	IR GUN #: 17	3.5	4.2	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: 17	3.1	3.8	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: 17	4.7	5.4	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: 17	4.5	5.2	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #: 17	3.2	3.9	Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
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EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None
EC Client Box Other	IR GUN #:			Wet Ice Blue Ice Dry Ice Water None

☐ See Temperature Excursion Form

12/26/2025

Login Container Summary Report

240-240707

12/31/2025

Temperature readings _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservation Added	Preservation Lot Number
94137-F-20251222-01	240-240707-A-1	Plastic 60 mL - unpreserved				
94137-F-20251222-01	240-240707-B-1	Plastic 60 mL - unpreserved				
94137-F-20251222-01	240-240707-C-1	Plastic 500ml - unpreserved				
94137-F-20251222-01	240-240707-D-1	Plastic 500ml - with Nitric Acid	<2			
EB-001-F-20251222-01	240-240707-A-2	Plastic 60 mL - unpreserved				
EB-001-F-20251222-01	240-240707-B-2	Plastic 60 mL - unpreserved				
EB-001-F-20251222-01	240-240707-C-2	Plastic 500ml - unpreserved				
EB-001-F-20251222-01	240-240707-D-2	Plastic 500ml - with Nitric Acid	<2			

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Belgium
Brazil
Canada
China
Colombia
France
Germany
Ghana
Guyana
Hong Kong
India
Indonesia
Ireland
Italy
Japan
Kazakhstan
Kenya
Malaysia
Mexico
Mozambique
The Netherlands
New Zealand
Peru
Poland
Portugal
Puerto Rico
Romania
Senegal
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